The Proceedings of the

U.S. Army Aviation and Missile Command 1997 Advance Planning Briefing For Industry

October 20-22, 1997

The Sparkman Center Auditorium Redstone Arsenal, Alabama

DTIC QUALITY INSPECTED 8 DISTRIBUTION STATEMENT A Approved for public releases Distribution Unlimited

Technical Report-RD-TI-97-01

19980115

	CONTRACTOR AND
1135 -	Air Defense Command and Control Systems (ADCCS) LTC James M. Althouse, Project Manager, ADCCS
1150 -	LUNCH at the Redstone Officers' Club Mr. Laurence H. Burger, Director, U.S. Army Space and Missile Defense Command's Space and Missile Battle Lab
1340 -	Acquisition Review Ms. L. Marlene Cruze, Director, AMCOM Acquisition Center
1400 -	Legislative Initiatives AMCOM Legal Office
1420 -	BREAK
1450-	Command Ombudsman Mr. John W. Finafrock, AMCOM Ombudsman
1510 -	Small Business Office Mr. John F. Nelson, Small Business Advocate, Small and Disadvantaged Business Utilization Office
1530 -	Question and Answer Session Dr. William C. McCorkle, Technical Director for Missiles, USAAMCOM, and Executive Director Missile RD&E Center

ş³ .

·: •

1997 APBI AGENDA

U.S. ARMY AVIATION & MISSILE COMMAND

ADVANCE PLANNING BRIEFING FOR INDUSTRY

MONDAY, OCTOBER 20, 1997

1300 - 1600 EARLY REGISTRATION - SPARKMAN AUDITORIUM (Bldg. 5304)

TUESDAY, OCTOBER 21, 1997			
0730 -	Registration - Sparkman Center Auditorium (Bldg. 5304)		
0815 -	Administrative Announcements Ms. Tammy S. Williams, Acting Technical Industrial Liaison, Technology Integration Office, Missile Research, Development, and Engineering (MRD&E) Center, U.S. Army Aviation & Missile Command (USAAMCOM)		
0820 -	Welcome MG Emmitt E. Gibson, Commanding General, USAAMCOM		
0835 -	U.S. Army Aviation & Missile Command Overview Mr. John M. Moore, Resource Management Directorate		
0905 -	BREAK		
0930 -	Deputy for Systems Acquisition Dr. Eugene E. Paro, Principal Deputy Deputy for Systems Acquisition		
1015 -	Program Executive Office for Tactical Missiles (PEO-TM) Ms. Vicky L. Armbruster, Deputy Program Executive Officer, Tactical Missiles		
1100 -	Program Executive Office for Air & Missile Defense (PEO-AMD) Mr. A. Q. Oldacre, Deputy Program Executive Officer, Air and Missile Defense		
1145 -	LUNCH at the Redstone Officers' Clab Dr. Michael Andrews, Director for Technology Office of the Assistant Secretary of the Army Research, Development, and Acquisition		
1345	Program Executive Office for Aviation Mr. Paul Bogosian, Deputy Program Executive Officer, Aviation		
1415 -	TRADOC Keynote Address COL Mark P. Gay, Director, Future Battle Directorate, U.S. Army Training and Doctrine Command		

1500 -	BREAK
1530 -	Missile RD&E Center Vision and Strategic Plan Dr. William C. McCorkle, Technical Director for Missiles, USAAMCOM and Executive Director Missile RD&E Center
1615 -	Aviation RD&E Center Vision and Strategic Plan Mr. Tom L. House, Technical Director for Aviation, USAAMCOM and Executive Director Aviation RD&E Center
1700 -	Question and Answer Session Dr. William C. McCorkle, Technical Director for Missiles, USAAMCOM, and Executive Director Missile RD&E Center
1800 -	Reception - Redstone Arsenal Officers' Club
WEDNES	DAY, OCTOBER 22, 1997
0800 -	Announcements Ms. Tammy S. Williams, Acting Technical Industrial Liaison, Technology Integration Office, Missile RD&E Center
0805	Missile RD&E Center Opportunities Dr. Paul L. Jacobs, Associate Director for Technology, Missile RD&E Center
0845	Aviation RD&E Center Contract Opportunities Mr. Robert V. Kennedy, Associate Director for Technology, Aviation RD&E Center
0930 -	BREAK
1000 -	Integrated Materiel Management Center (IMMC) Mr. John R. Chapman, Deputy Director, IMMC
1015 -	Redstone Technical Test Center (RTTC) Test and Evaluation Command Ms. Sharon A. Mueller-Myers, Contracts Specialist, RTTC
1035 -	Instrumentation, Targets, and Threat Simulators (ITTS) Mr. Henry I. Jehan, Jr. ITTS, U.S. Army Simulation, Training, and Instrumentation Command
1100 -	Redstone Arsenal Support Activity (RASA) COL Duane E. Brandt, Commander, RASA
1115 -	Resource Management Directorate Mr. William G. Matthews, Deputy Director, AMCOM Resource Management Directorate

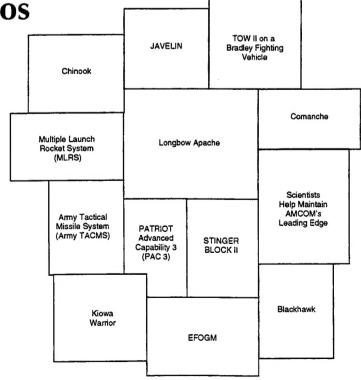
. .

The second secon

Table of Contents

U.S. Army Aviation & Missile Command Overview	1
Deputy for Systems Acquisition	35
Program Executive Office for Tactical Missiles (PEO-TM)	49
Program Executive Office for Air & Missile Defense (PEO-AMD)	65
Program Executive Office for Aviation	87
Missile RD&E Center - Vision and Strategic Plan	115
Aviation RD&E Center - Vision and Strategic Plan	133
Missile RD&E Center - Contract Opportunities	145
Aviation RD&E Center -Contract Opportunities	167
Integrated Materiel Management Center (IMMC)	187
Redstone Technical Test Center (RTTC)	199
Instrumentation, Targets, and Threat Simulators (ITTS)	211
Redstone Arsenal Support Activity (RASA)	225
Resource Management Directorate	
Acquisition Center - Acquisition Review	245
Command Legal Office Legislative Initiatives	255
Command Ombudsman	267
Small and Disadvantaged Business. Utililization Office	275
Acronyms	282

Cover Photos



The Proceedings of the

1997 U.S. Army Aviation and Missile Command (AMCOM) Advance Planning Briefing For Industry

October 20-22, 1997

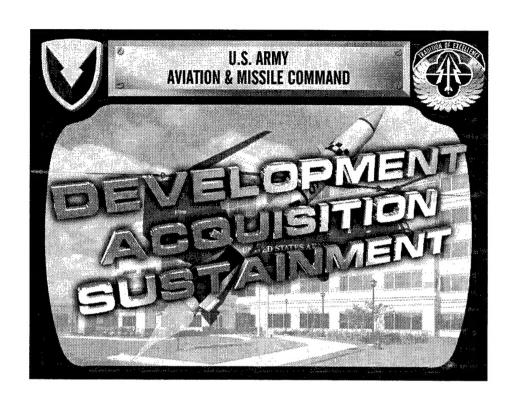
The Sparkman Center Auditorium Redstone Arsenal, Alabama

> Cleared For Public Release Distribution Is Unlimited

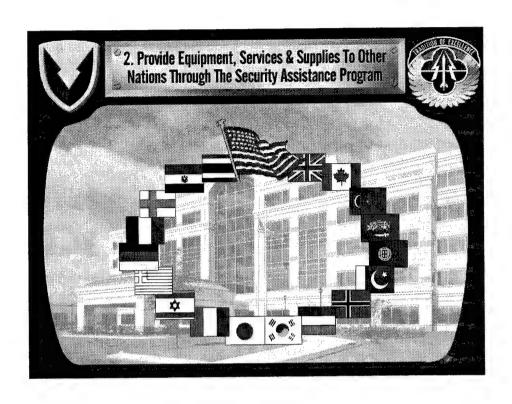










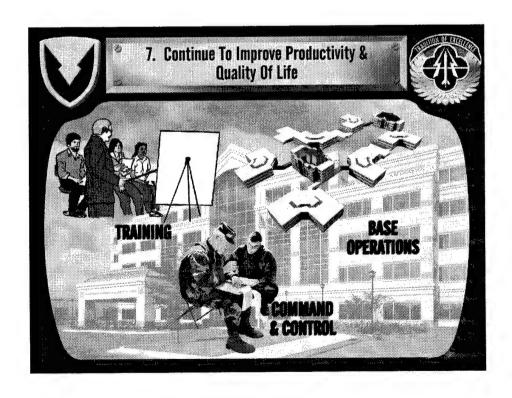


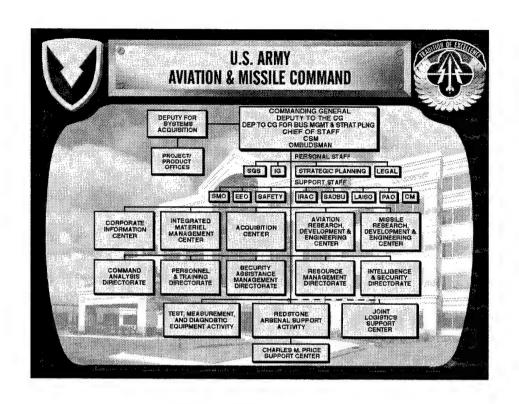


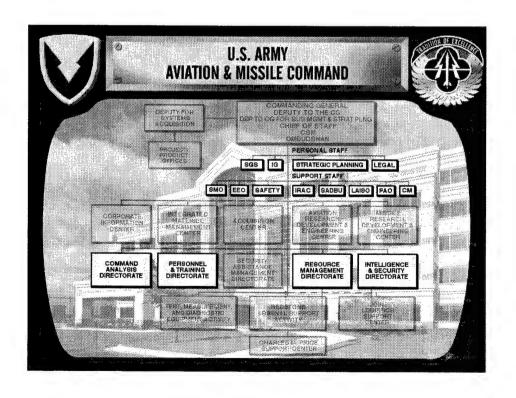




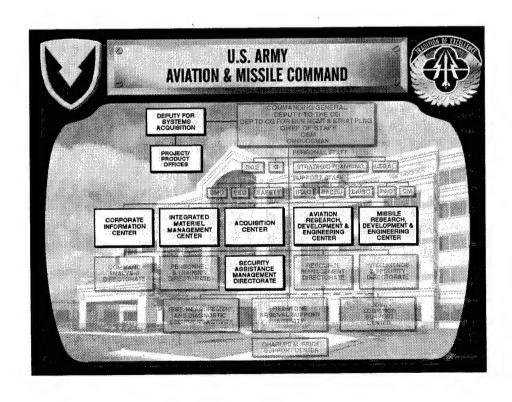


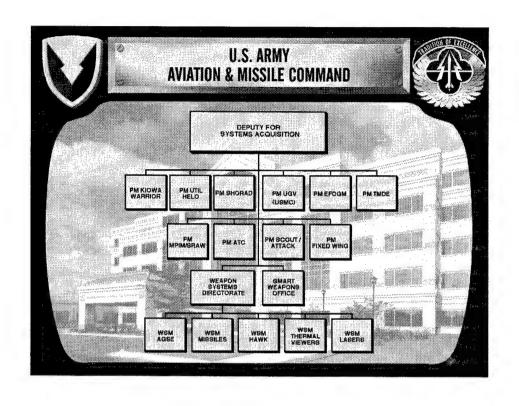


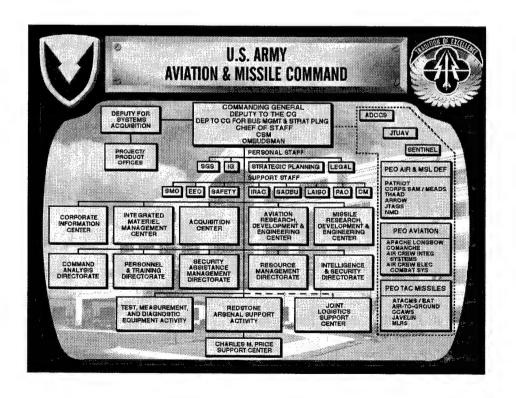


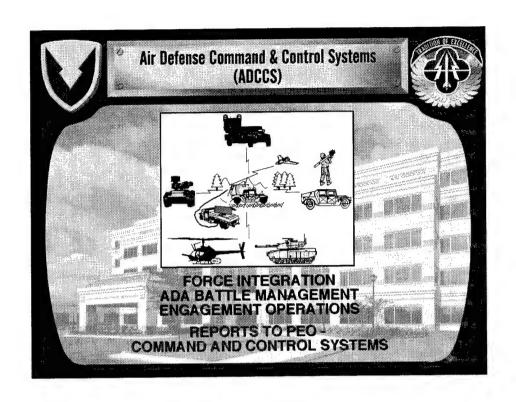




















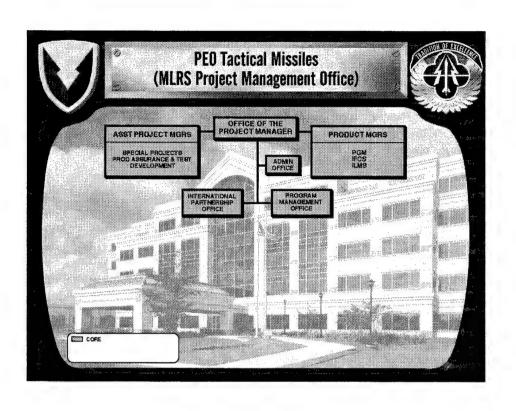


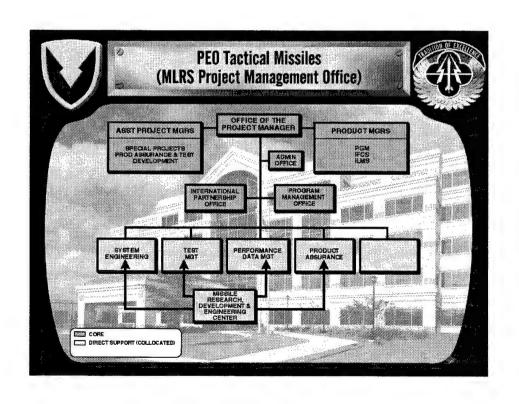


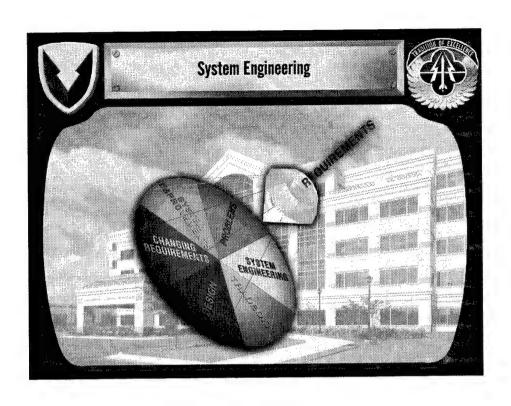








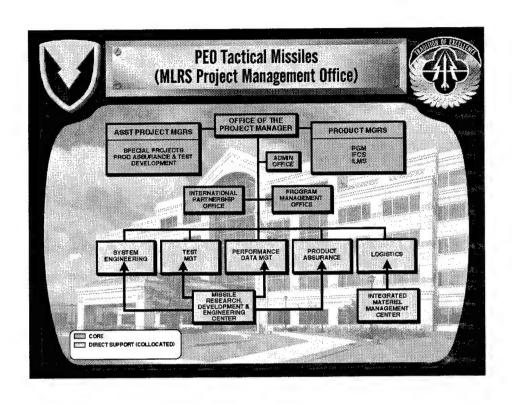


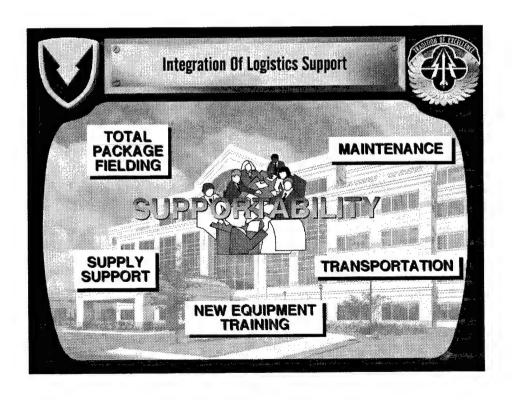


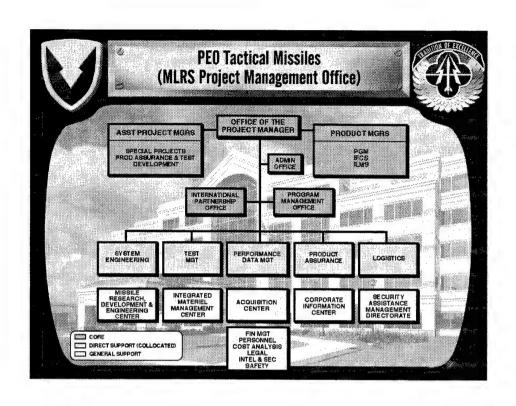


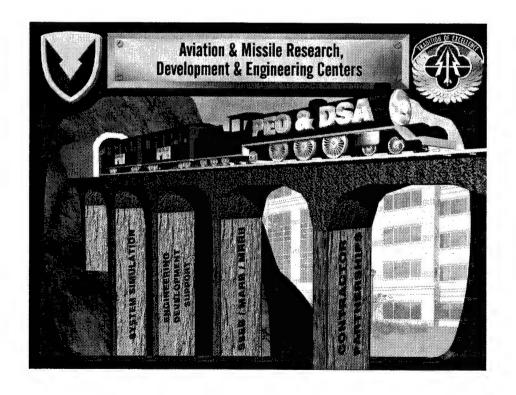










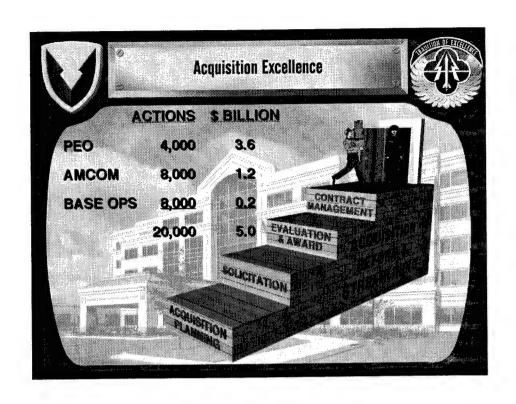




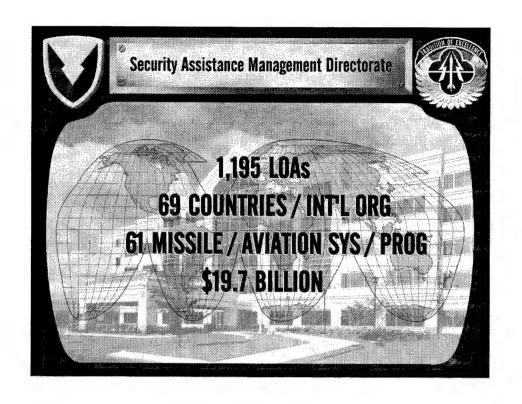


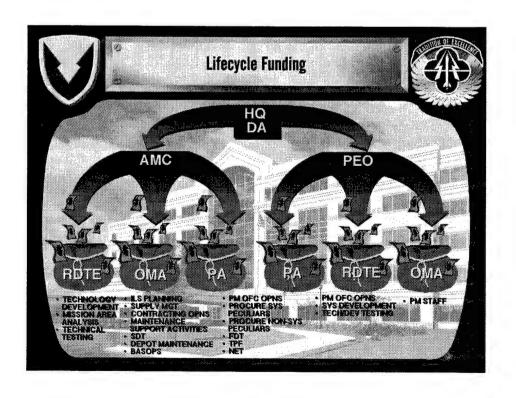


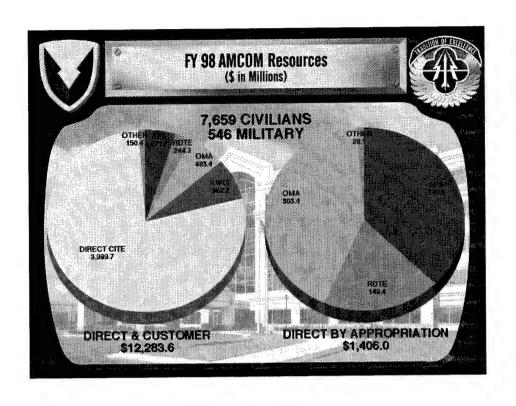


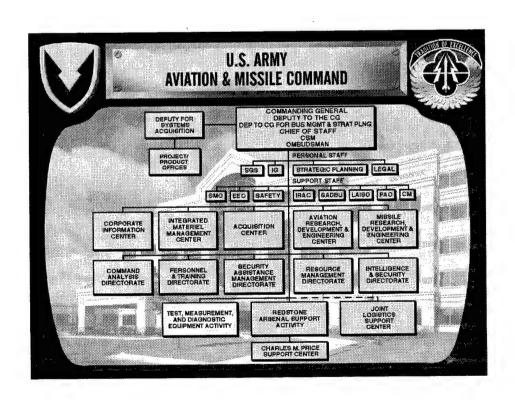


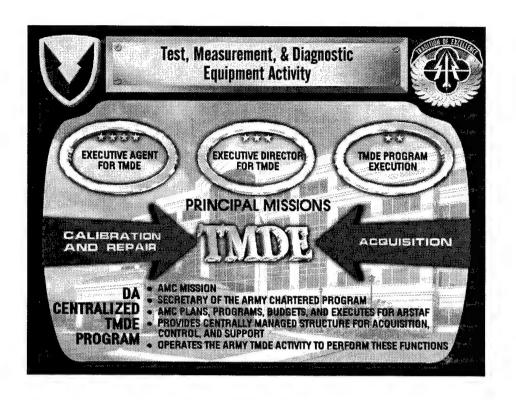


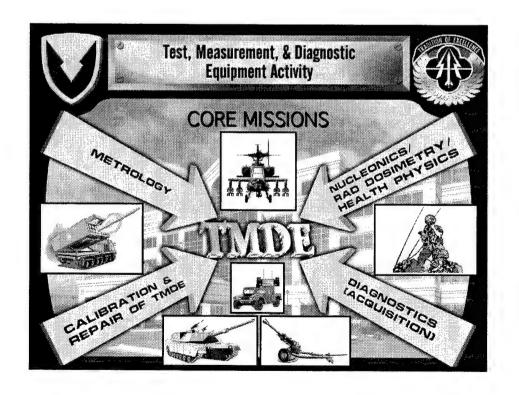


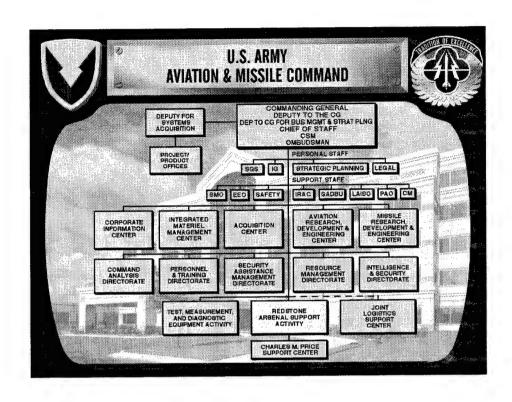


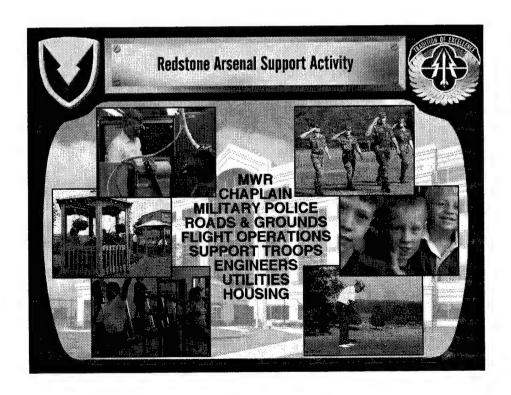


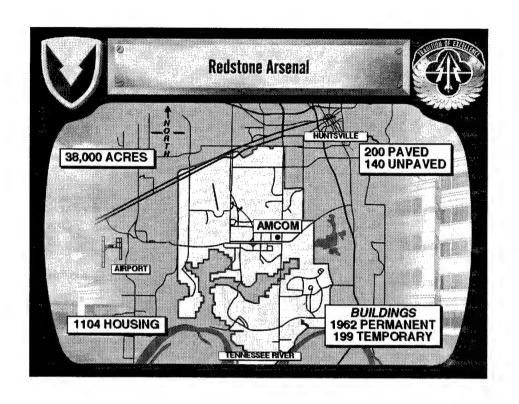


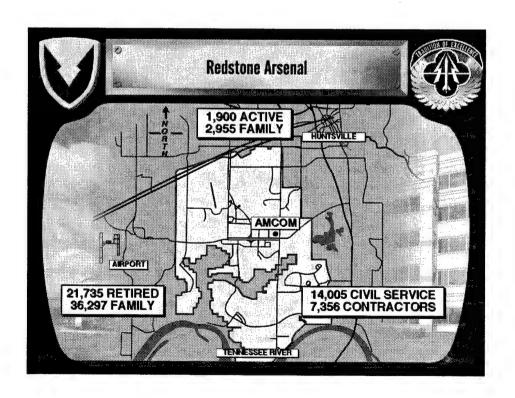


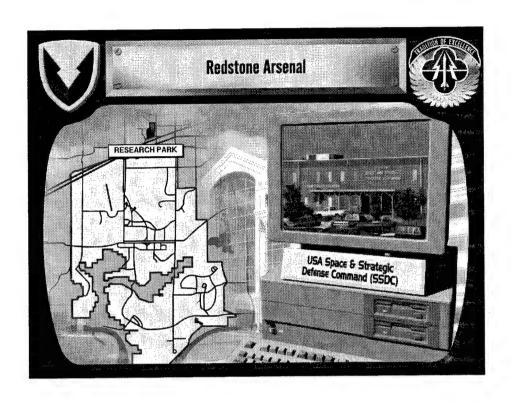


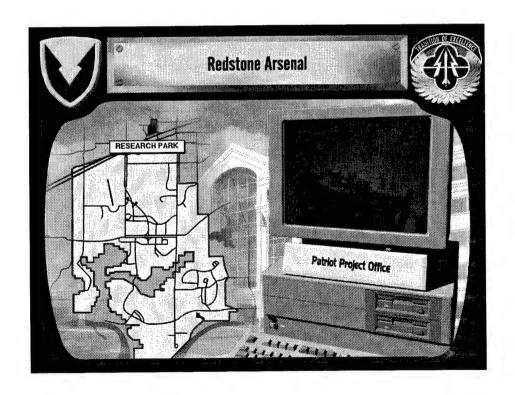




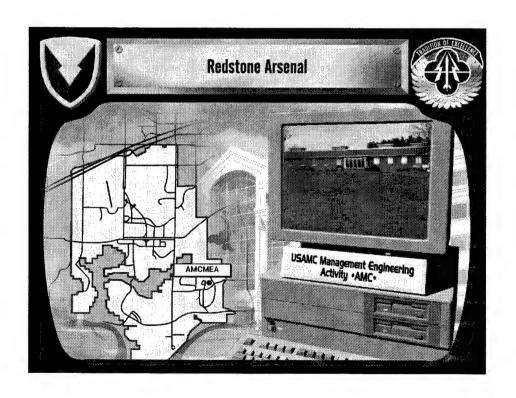


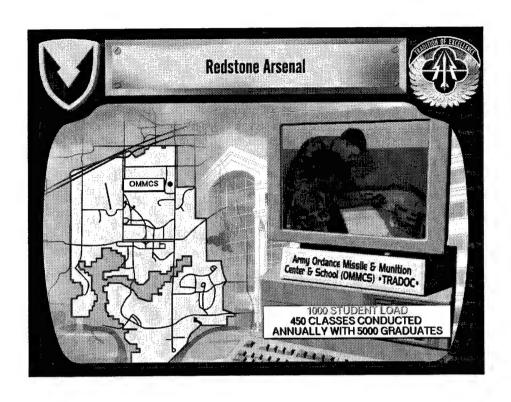


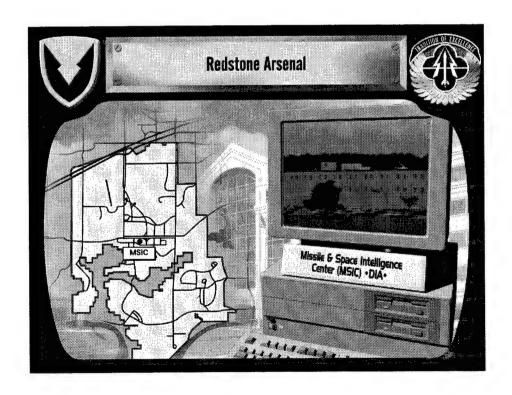




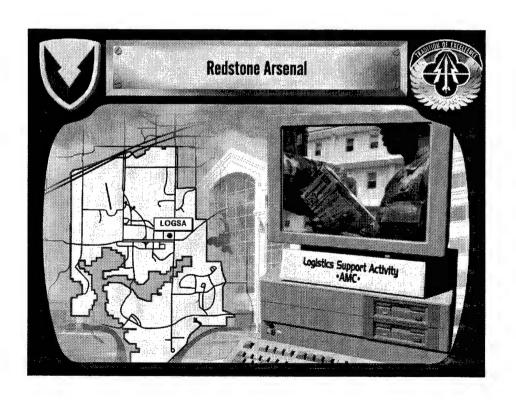


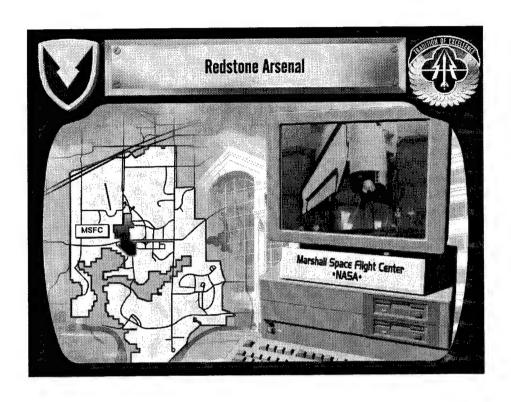












Acquisition
Excellence
Technology
Generation
& Application
Logistics
Power
Projection



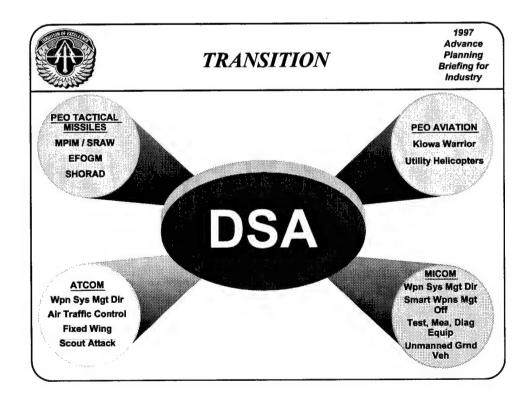


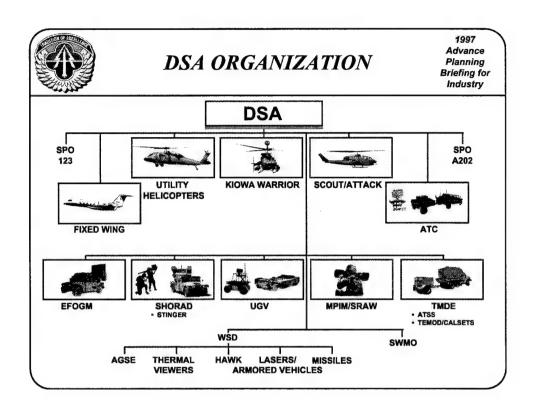
DEPUTY FOR SYSTEMS ACQUISITION

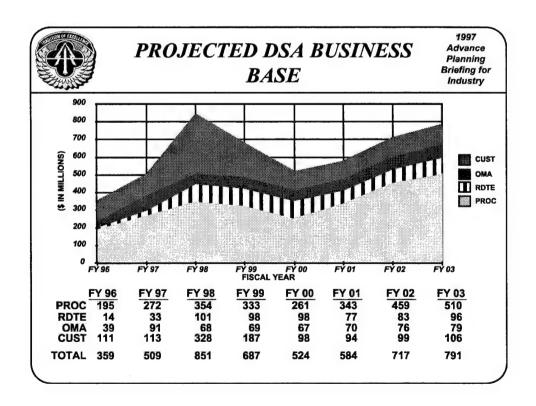
1997 Advance Planning Briefing for Industry



OCTOBER 1997 BG ROBERT E. ARMBRUSTER









CHALLENGES

1997 Advance Planning Briefing for Industry

- MERGING OF AVIATION AND MISSILE PMs IN DSA ORGANIZATION
- INSTITUTIONALIZING THE SPIRIT OF ACQUISITION REFORM
- OBSOLESCENCE AND MODERNIZATION THROUGH SPARES
- DOING MORE WITH LESS (\$ AND PEOPLE)
- LIFE CYCLE MANAGEMENT
- MANAGING CHANGE





FIXED WING

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- · SUSTAINMENT:
- C-12 RC-12 C-20 C-23 C-21 C-26
- UC-35A
- PRODUCTION:
- UC-35A C-23B+

PROGRAM FOCUS

- · CONTROL/REDUCE COST
- FLEET STATUS VISIBILITY
- AUTOMATED
 MANAGEMENT CONTROLS
- AVIONICS UPGRADE REQUIREMENTS

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC: LTC WILLIAM LAKE - (205) 955-0081

ITEM	AWARD DATE	CONTRACT TYPE	COMMENTS
C-12/RC-12/U-21	AWARDED 1996	FFP	SOLE SOURCE (OPTIONS)
C-23B+	AWARDED 1994	FFP	SOLE SOURCE (OPTIONS)
C-26	AWARDED 1996	FFP	SOLE SOURCE (OPTIONS)
C-21	AWARDED 1995	FFP	SOLE SOURCE (OPTIONS)
C-20	AWARDED 1996	FFP	SOLE SOURCE (OPTIONS)
UC-35A	AWARDED 1996	FFP	SOLE SOURCE (OPTIONS)



UTILITY HELICOPTERS (UH-60L BLACK HAWK & UH-1 H/V)

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- PRODUCTION
- SUSTAINMENT
- -----

FLEETWIDE SLEP

FLIGHT SAFETY PARTSFLEET MGT (FLEET STRATEGY)

PROGRAM FOCUS
CONTINUE FIELDING UH-60Ls

IDENTIFY OUT-YEAR FUNDING FOR UH-60Q CONVERSION

- ESTABLISH REFURB CAPABILITY
 (A/F & COMPONENT)
- SUSTAINMENT
- RETIREMENT

POTENTIAL CONTRACT OPPORTUNITIES

COL TOM HARRISON - (205) 876-6821 ITEM AWARD DATE CONTRACT TYPE COMMENTS **UH-60 PRODUCTION** 18 JUL 97 FFP - 5 Yr Multiyear SOLE SOURCE PRODUCTION GFE: **T700 ENGINE PRODUCTION** 30 SEP 97 (e) FFP - 5 Yr SOLE SOURCE **AUXILLARY POWER UNITS** 30 SEP 97 (e) FFP - 5 Yr **SOLE SOURCE** L to Q ECP (PRODUCTION 15 NOV 97 (e) **FFP** SOLE SOURCE INCORPORATION) **UH-1 REFURBISHMENT** 18 JUL 97 FFP - 5 Yr COMPETITIVE **T53 ENGINE M&0** 2098 **FFP** COMPETITIVE **EXTERNAL FUEL SYS** 4Q97 **FFP SOLE SOURCE**



KIOWA WARRIOR

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- PRODUCTION
- RETROFIT
- SYSTEM SAFETY
 ENHANCEMENT PROGRAM
 (SSEP)
- FOREIGN MILITARY SALES

PROGRAM FOCUS

- FLEET READINESS
- SYSTEM SAFETY ENHANCEMENT
- PRODUCTION/RETROFIT
- · NEW UNIT FIELDINGS

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC: LTC LAWRENCE GINDER - (205) 842-8892

LOT 15 ITEM	AWARD DATE	CONTRACT TYPE	COMMENTS
AIRFRAME	FY 98	FFP	SOLE SOURCE
MAST MOUNTED SIGHT (MMS)	FY 98	FFP	SOLE SOURCE
ENGINES	FY 98	FFP	SOLE SOURCE
CONTROL DISPLAY SYSTEM (CD	S) FY 98	FFP	SOLE SOURCE
SYS SAFETY ENHANCEMENT PRO	GRAM (SSEP)		
ENGINES	FY 98	FFP	SOLE SOURCE
CREW SEATS	FY 98	FFP	SOLE SOURCE
AIRBAGS	FY 00	FFP	SOLE SOURCE
IMPROVED DATA MODEM (DM)	FY 98	FFP	SOLE SOURCE



SCOUT ATTACK (OH-58 A/C & AH-1 COBRA)

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- SUSTAINMENT
- RETIREMENT
- SUSTAINMENT
- RETIREMENT

PROGRAM FOCUS

- APPLICATION OF MODIFICATION KITS (SINCGARS, GPS, OIL FILTER) RETIREMENT
 - 1208 PROGRAM
- RETIRE AIRCRAFT
 NG DIRECTED PROCUREMENT
 TOW 2B UPGRADE
 BORESIGHT EQUIPMENT
 FMS SALES AND REFURBISHMENTS

POTENTIAL CONTRACT OPPORTUNITIES

AWARD DATE CONTRACT TYPE

LTC JAMES E. WEGER - (205) 955-0989

COMMENTS

OH-58 A/C

ITEM

TBD BASED UPON NG PRIORITIES/FUNDING

AH-1 COBRA

TBD BASED UPON NG PRIORITIES/FUNDING

CPFF

ENGINEERING SERVICES

OCT 98

SOLE SOURCE



AIR TRAFFIC CONTROL **SYSTEMS**

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

MOBILE TOWER SYSTEM (MOTS)

- MS O/I FY 98
- MS III FY 99
- **ORD CURRENTLY BEING** STAFFED FOR FINAL APPROVAL

PROGRAM FOCUS

- · MOBILE, DEPLOYABLE, RELIABLE, TACTICAL AIR TRAFFIC CONTROL TOWER SYSTEM WITH FULL VOICE / **DATA COMMUNICATIONS** CAPABILITY
- · COTS, NDI WITH GFE

POTENTIAL CONTRACT OPPORTUNITIES

LTC JOSEPH DURSO - (205) 876-8701

AWARD DATE CONTRACT TYPE

COMMENTS

MOBILE TOWER SYSTEM (MOTS)

ITEM

FY 00

FFP

COMPETITIVE



ENHANCED FIBER OPTIC GUIDED MISSILE ADVANCED TECHNOLOGY DEMONSTRATION ⁵

1997
Advance
Planning
Briefing for
Industry

PROGRAM PHASES



- PHASE I VPE
- PHASE IIA ACTD
- PHASE IIB EUE

PROGRAM FOCUS

- · EARLY USER INVOLVEMENT
- UNIT CERTIFICATION TESTING
- PARTICIPATE IN RFPI ACTD
- CONTINUE 82ND ABN DIV
 EVALUATION OF TECHNOLOGIES
- PROVIDE RESIDUAL WARFIGHTING CAPABILITY

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC: MR. ROBERT BERGMAN - (205) 876-8456

ITEM

AWARD DATE

CONTRACT TYPE

COMMENTS

EXTENDED USER EVALUATION SUPPORT (EUES)

FY 99

CPIF

SOLE SOURCE



SHORAD STINGER

1997 Advance Planning Briefing for



PROGRAM PHASES

- SUSTAINMENT
- FMS PRODUCTION
- PRODUCTION MOD
- PROGRAM DEFINITION AND RISK REDUCTION
- · CONCEPT DEFINITION

Industry PROGRAM FOCUS

- MAINTAIN INVENTORY
- UPGRADE CAPABILITIES

BLOCK

BLOCK II

 PLATFORM IMPROVEMENTS

POTENTIAL CONTRACT OPPORTUNITIES

MR DOUG HART - (205) 876-6193 GOVT TPOC: ITEM AWARD DATE CONTRACT TYPE COMMENTS **BLOCK I (OPTION) JAN 98** FFP **SOLE SOURCE CPFF BLOCK II FEB 98** SOLE SOURCE **PLATFORM (OPTION) JAN 98** FFP SOLE SOURCE MISSILE E/S (OPTION) **NOV 97 CPFF** SOLE SOURCE LAUNCHER E/S (OPTION) **NOV 97** CPFF **SOLE SOURCE FMS** MISSILES **DEC 97 FFP** SOLE SOURCE **SPARES FEB 98** FFP **SOLE SOURCE** LAUNCHER **DEC 97 FFP** SOLE SOURCE FTA APR 98 **CPFF** SOLE SOURCE CFT **SEP 97** FFP **SOLE SOURCE** CONTAINERS **JUL 98 FFP** COMPETITIVE



SHORAD AVENGER

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- SUSTAINMENT
- PRODUCTION
- FMS PRODUCTION
- PRODUCTION MOD

PROGRAM FOCUS

- MAINTAIN FLEET
- **CONTINUE PRODUCTION**
- PRODUCT IMPROVEMENTS ECU / PPU **ACE REDESIGN**

SLEW-TO-CUE

POTENTIAL CONTRACT OPPORTUNITIES

MR DOUG HART - (205) 876-6193

AWARD DATE CONTRACT TYPE

COMMENTS

SLEW-TO-CUE

ITEM

FY 98

FFP

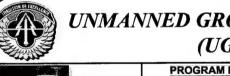
COMPETITIVE

ECU / PPU

FY 99

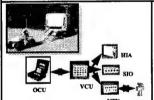
FFP

SOLE SOURCE



UNMANNED GROUND VEHICLE (UGV)

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- **TACTICAL UNMANNED** VEHICLE (TUV) PDRR
- VEHICLE TELEOPERATION CAPABILITY (VTC)

PDRR **EMD**

PROGRAM FOCUS

- PROGRAM DEFINITION
- RISK REDUCTION
- IMPROVED STS KIT
- CONTINUED DEVELOPMENT

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC:

GLENN CRUZE - (205) 955-7103

ITEM AWARD DATE CONTRACT TYPE COMMENTS **CPFF** SOLE SOURCE **ENGINEERING SERVICES DEC 98 CPFF** SOLE SOURCE STS KIT **OCT 97** SOLE SOURCE **FEB 98 CPFF** STS KIT SYSTEM ENGINEERING **MAR 98 CPFF 8A SET ASIDE** & TECHNICAL SERVICES



MPIM/SRAW MULTI-PURPOSE INDIVIDUAL MUNITION/ SHORT RANGE ASSAULT WEAPON

1997 Advance Planning **Briefing for** Industry



PROGRAM PHASES

- 18 MONTH, EMD PHASE 1 (RISK MITIGATION) INITIATED OCT 96 47 MONTH, EMD PHASE 2, (MATURATION) BEGINS APR 98
- PRODUCTION: LRIP TO BEGIN 1QTR FY 02
- FUE: 4QTR FY 02
- FIELDING: FORCE PACKAGE 1 & 2, INFANTRY & COMBAT ENGINEER

PROGRAM FOCUS

PROVIDING A LIGHTWEIGHT. SHOULDER FIRED, GUIDED MISSILE CAPABLE OF DEFEATING:

> EARTH AND TIMBER BUNKERS

LIGHT ARMORED VEHICLES

MASONRY STRUCTURES

COMMON FLIGHT MODULE WITH USMC PREDATOR PROGRAM

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC: COL CHUCK JONES - (205) 876-7186

AWARD DATE ITEM

CONTRACT TYPE

COMMENTS

LRIP

2QTR FY 01

FFP

SOLE SOURCE

PRODUCTION (OPTION)

2QTR FY 01

FFP

SOLE SOURCE



TMDE

ATSS

INTEGRATED FAMILY OF TEST EQUIPMENT BASE SHOP TEST FACILITY (BSTF) ELECTRO-OPTICAL TEST FACILITY (EOTF)
SOLDIER PORTABLE ON-SYSTEM REPAIR TOOL (SPORT)
ELECTRONIC REPAIR SHELTER (ERS)

Advance Planning Briefing for industry

1997



PROGRAM PHASES

- **BSTF PHASE III (PRODUCTION,** FIELDING/DEPLOYMENT & **OPERATIONAL SUPPORT (PFD&** OS))
- **EOTF PHASE II (ENGINEERING** AND MANUFACTURING **DEVELOPMENT)**
- **SPORT PHASE III PFD&OS**
- **ERS PHASE III PFD&OS**

PROGRAM FOCUS

- STANDARD AUTOMATIC TEST SUPPORT SYSTEMS (ATSS)
- **FAULT ISOLATE AND REPAIR** CAPABILITY FOR ALL LEVELS OF ARMY MAINTENANCE
- MOBILE ELECTRONIC REPAIR **FACILITY TO SCREEN, REPAIR** AND TEST PRINTED CIRCUIT **BOARDS**
- REDUCE ARMY O&S COSTS WITH **MULTI-COMMODITY ATSS** SOLUTIONS

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC LTC JAMES D. WARGO - (205) 955-6359

		(200) 000-0000	
ITEM	AWARD DATE	CONTRACT TYPE	COMMENTS
S-280 C/G SHELTER	DEC 97	FFP	COMPETITIVE
ERS - PRODUCTION	NOV 97	FFP	8A SET ASIDE
SPORT- PRODUCTION	JAN 98	FFP	SOLE SOURCE (OPTION)
SOS TEST PROGRAM SE	T MAR 98	FFP	8A SET ASIDE
ERS - PRODUCTION	DEC 98	FFP	SOLE SOURCE (OPTION)
EOTF - PRODUCTION	DEC 99	FFP	SOLE SOURCE (OPTION)



TEST EQUIPMENT MODERNIZATION (TEMOD)

1997 Advance Planning Briefing for Industry



Typical of a LAN/ WAN Analyzer

PROGRAM PHASES

- PRE-CONTRACT AWARD
- USER AND MARKET SURVEY
- DRAFT SPECIFICATION

PROGRAM FOCUS

- PROVIDE TMDE TO SUPPORT MAINTENANCE OF ARMY MATERIAL
- MINIMIZE PROLIFERATION OF TMDE
- REDUCE ACQUISITION AND 0&S COSTS

POTENTIAL CONTRACT OPPORTUNITIES

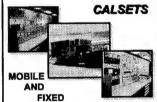
GOVT TPOC: WES MCELVEEN - (205) 955-6352

ITEM	AWARD DATE	CONTRACT TYPE	COMMENTS
LAN/WAN ANALYZER	FEB 99	FFP	COMPETITIVE
IDENTIFICATION FRIEN OR FOE TEST SET	D FEB 99	FFP	SOLE SOURCE
SIGNAL GENERATOR	DEC 97	FFP	SOLE SOURCE
PITOT STATIC TEST SE	T DEC 97	FFP	SOLE SOURCE



CALIBRATION SETS EQUIPMENT (CALSETS)

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- SUSTAINMENT
- TECHNOLOGY INSERTION
- · FMS

PROGRAM FOCUS

- CALIBRATION AND REPAIR FOR ARMY TMDE
- DEPLOY IN MOBILE AND FIXED CONFIGURATIONS
- USE OF OFF-THE-SHELF HIGH PRECISION INSTRUMENTS
- DEFINE QUALITY FOR THE ARMY

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC: WES MCELVEEN - (205) 955-6352

GUVI IPO	C: MES MCELACEN	- (203) 933-0332	
ITEM	AWARD DATE	CONTRACT TYPE	COMMENTS
HYDRAULIC PRESSURE STDS	NOV 97	FFP	COMPETITIVE
INSTRUMENT CONTROLLERS	MAR 98	FFP	COMPETITIVE
ATTENUATOR CALIBRATORS	FEB 98	FFP	COMPETITIVE
VXI REPAIR WORKSTATIONS	MAR 98	FFP	COMPETITIVE
FREQUENCY COUNTERS	MAR 99	FFP	COMPETITIVE
PHOTONICS CALIBRATION ST	DS MAR 99	FFP	COMPETITIVE
FUNCTION GENERATORS	MAY 99	FFP	COMPETITIVE
ELECTO OPTIC WORKSTATION	NS MAR 99	FFP	COMPETITIVE



AVIATION GROUND SUPPORT EQUIPMENT (AGSE)

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- EXPLORATION
- DEVELOPMENTAL
- PRODUCTION
- FIELDING
- SUSTAINMENT

PROGRAM FOCUS

- REPLACE OBSOLETE UNSUPPORTABLE AVIATION GROUND SUPPORT EQUIPMENT
- ALL NEW EQUIPMENT WILL BE STANDARDIZED AND COMPATIBLE WITH ALL ARMY AIRCRAFT
- NEW EQUIPMENT WILL ENHANCE BATTLE DAMAGE REPAIR PROCEDURES

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC

MIKE TESI - (205) 842-8881

ITEM

AWARD DATE CONTRACT TYPE

COMMENTS

AIRCRAFT CLEANING AND DEICING SYSTEM (ACDS)

JAN 99

FFP

COMPETITIVE

UNIT MAINTENANCE AERIAL RECOVERY KIT (UMARK)

MAR 99

FFP

COMPETITIVE



HAWK

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

- SUSTAINMENT
- · FMS

PROGRAM FOCUS

- ENGINEERING SERVICES
- OBSOLESCENCE
- · FMS
- PRIVATE VENTURE SUPPORT

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC:

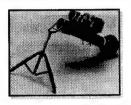
MAJ MARC SISK - (205) 842-9061

ITEM AWARD DATE CONTRACT TYPE COMMENTS **PHASE III CONVERSION - SAUDI** OCT 97 (EST) FFP/CPFF SOLE SOURCE **ARABIA PHASE III CONVERSION - GREECE** MAR 98 (EST) FFP/CPFF SOLE SOURCE SPECIAL REPAIR & RETURN - ISRAEL JAN 98 (EST) **CPFF SOLE SOURCE** SPECIAL REPAIR & RETURN - SAUDI MAR 98 (EST) **CPFF** SOLE SOURCE ARABIA **MOD KITS - BAHRAIN** FEB 98 (EST) FFP **SOLE SOURCE**



DRAGON

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

PHASE III

 OPERATIONAL SUPPORT

PROGRAM FOCUS

- SUSTAIN OPERATIONAL CAPABILITY UNTIL JAVELIN REPLACEMENT
- APPLICATION OF SAFETY CIRCUIT TO EXISTING ROUNDS

POTENTIAL CONTRACT OPPORTUNITIES

GOVT TPOC:

DANNY SNODGRASS - (205) 876-4179

COMMENTS

ITEM

AWARD DATE CONTRACT TYPE

COMMENTS

APPLICATION OF SAFETY CIRCUIT TO 3500 GEN II ROUNDS 2QTR / FY 98

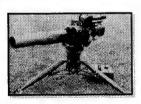
FFP

SOLE SOURCE



GROUND TOW

1997 Advance Planning Briefing for Industry



PROGRAM PHASES

PHASE III

- PRODUCTION
- OPERATIONAL SUPPORT

PROGRAM FOCUS

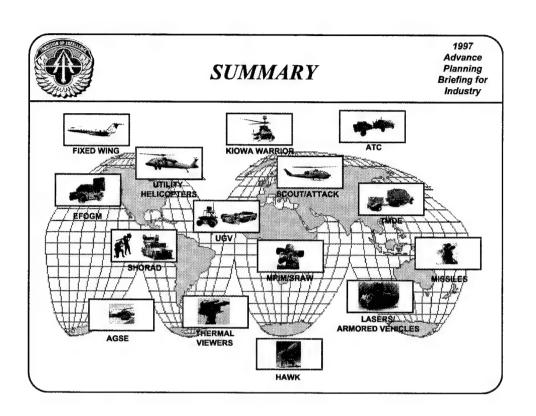
- MAINTAIN SYSTEM READINESS
- SUPPORT FMS CASES

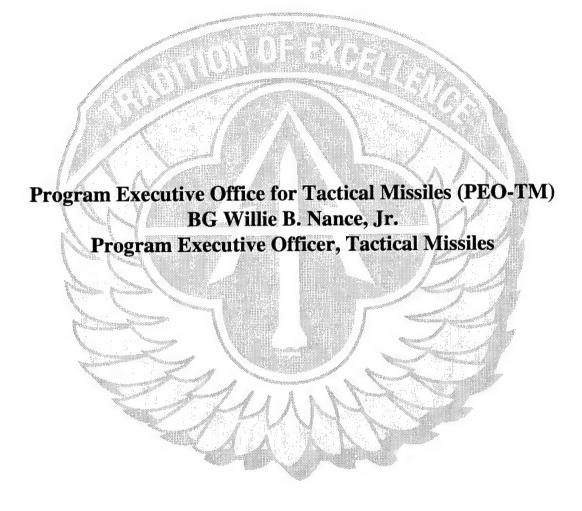
POTENTIAL CONTRACT OPPORTUNITIES

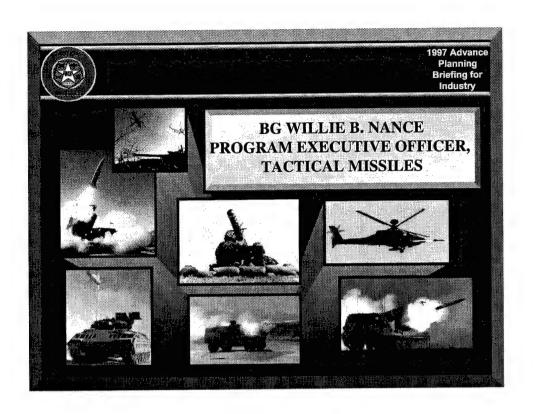
GOVT TPOC:

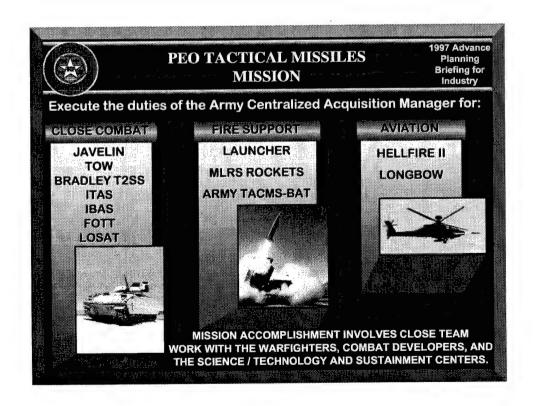
DANNY SNODGRASS - (205) 876-4179

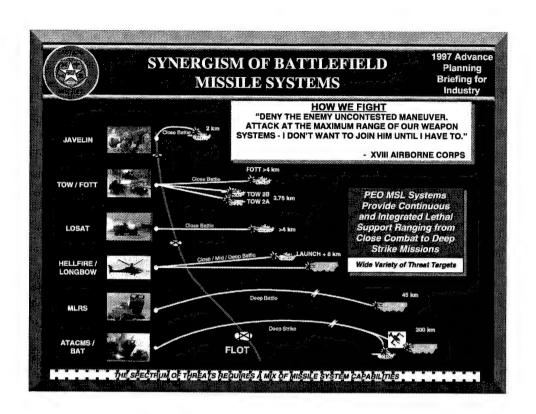
ITEM	AWARD DATE	CONTRACT TYPE	COMMENTS
LAUNCHER/NIGHT SIGHT PRODUCTION (TAIWAN FMS)	3QTR / FY 98	FFP	COMPETITIVE
AT2 FTS AND SUPPORT EQUIPMENT (TAIWAN FMS)	1QTR / FY 98	FFP	SOLE SOURCE
AT2 FTS AND SUPPORT EQUIPMENT (TURKEY FMS)	1QTR / FY 98	FFP	SOLE SOURCE

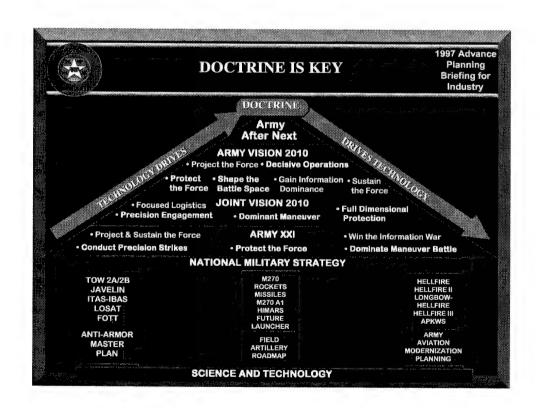


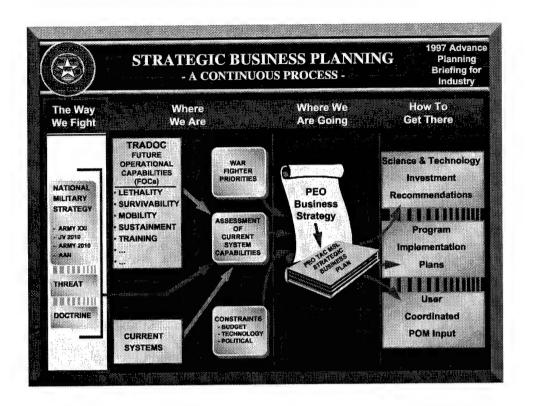


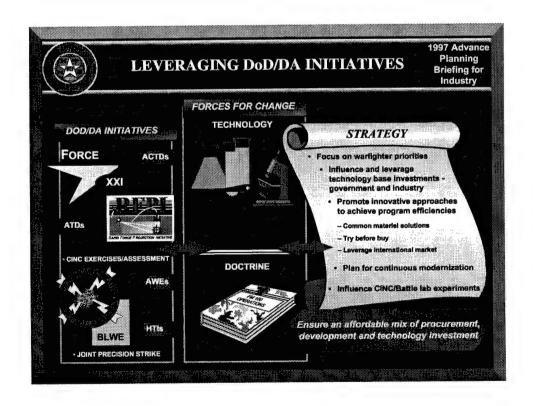














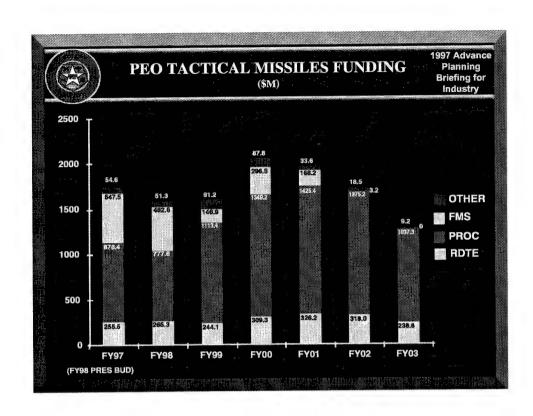
PEO TACTICAL MISSILES MODERNIZATION PLAN

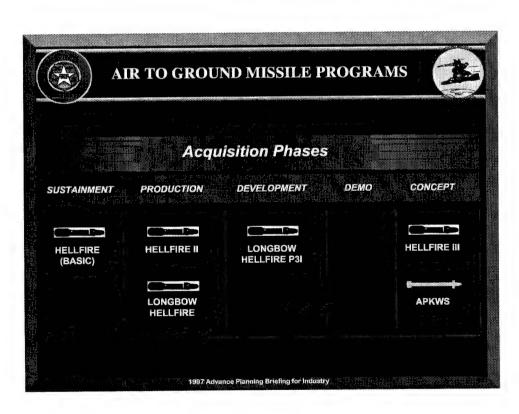
1997 Advance Planning Briefing for Industry

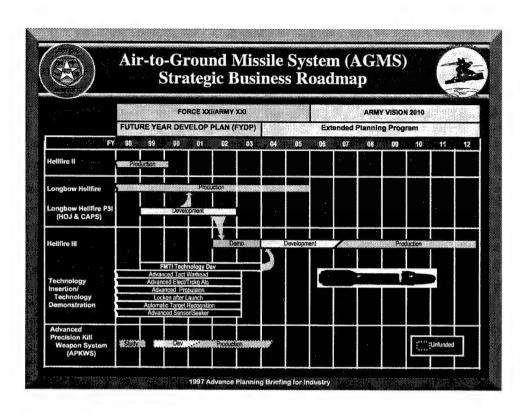
CHALLENGES

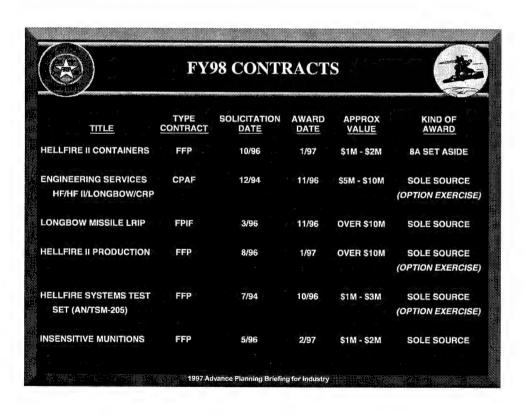
- DEFENSE INDUSTRY MERGER / RESTRUCTURE
- DEVELOPING, PRODUCING, AND SUSTAINING 30 YEAR SYSTEMS
- CONTINUE THE EFFICIENCIES OF ACQUISITION REFORM
- MAINTAINING ACQUISITION WORKFORCE COMPETENCIES

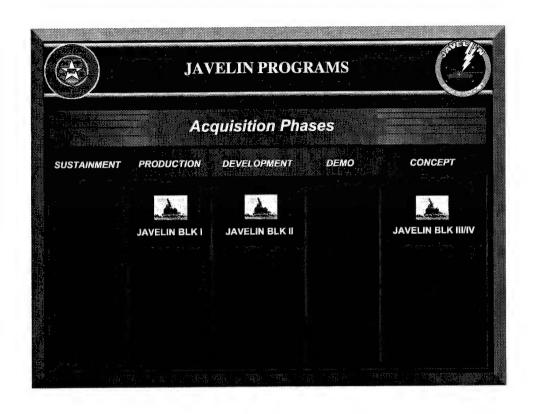


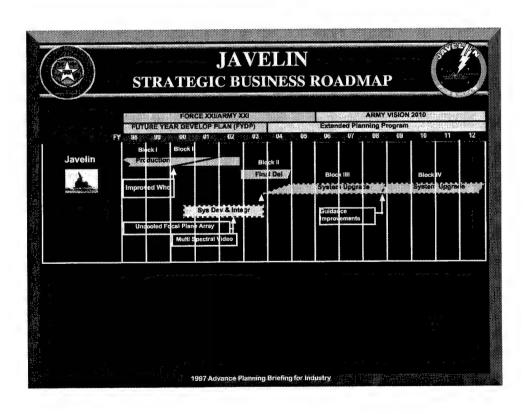




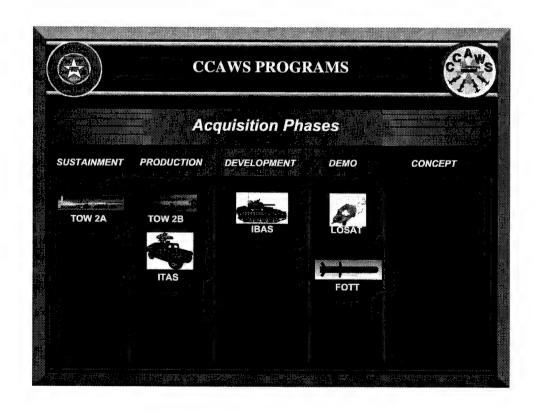


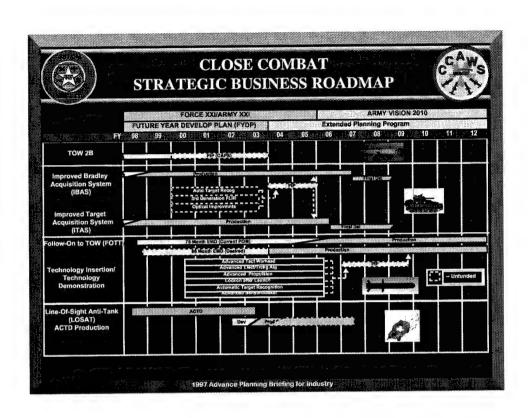






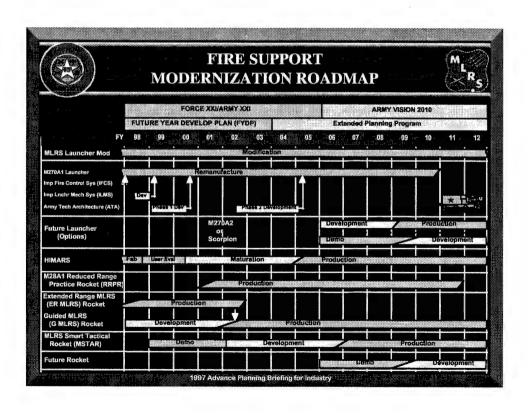
		CONTRAC			
TITLE	CONTRACT TYPE	RFP RELEASE DATE	AWARD DATE	APPROX VALUE	KIND OF AWARD
ENGINEERING SERVICES	CPAF	19 JUN 97	15 NOV 97	\$5.1M	SOLE SOURCE
INTERIM CONTRACTOR SUPPORT/CONTRACTOR SUPPORT	CPIF	17 MAR 97	01 OCT 97	\$6.6M	SOLE SOURCE
SYSTEM ENGINEERING	CPFF	01 AUG 97	30 NOV 97	\$0.7M	8A
AND TECHNICAL SUPPORT					er er
MULTIYEAR CONTRACT	FFP	N/A	31 DEC 97	\$157.8M	SOLE SOURCE
ALTERNATE WARHEAD CONTRACT	CPIF	N/A	31 DEC 97	\$4.7M	SOLE SOURCE
	1997 Advanc	e Planning Briefing for I	ndustry		



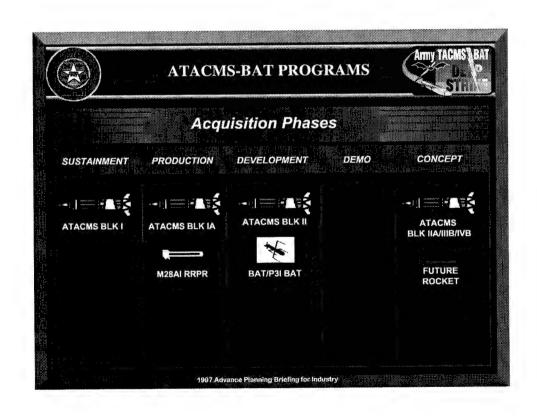


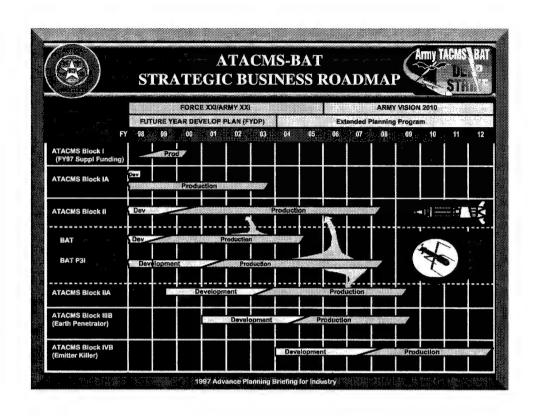
	FY98 CONTRACTS			Ç. Ç.	
TITLE	TYPE CONTRACT	RFP RELEASE DATE	AWARD DATE	APPROX VALUE	KIND OF AWARD
BFVS / T2SS ENGINEERING SERVICES	CPFF	APR 97	SEP 97	\$ 3.8M	SOLE SOURCE
FOTT ENGINEERING AND MANUFACTURING DEVELOPMENT (EMD)	CPIF / AF	OCT 97	JUN 98	\$ 5.5M	FULL AND OPEN COMPETITION
IBAS INTEGRATED LOGISTIC SUPPORT SERVICES (ILSS)	CPAF	SEP 97	JAN 98	\$ 2.6M	SOLE SOURCE
IBAS LOW RATE INITIAL PRODUCTION (LRIP) (SPLIT BY TWO CONTRACTS)	FFP	APR 97	AUG 97	\$ 43M	LIMITED
ITAS LRIP II	FFP	SEP 97	DEC 97	\$ 68M	SOLE SOURCE
LOSAT ADVANCED CONCEPT TECHNOLOGY DEMONSTRATION (ACTD)	CPIF	OCT 97	JAN 98	\$ 5M	SOLE SOURCE
TOW MISSILE PRODUCTION - FOREIGN MILITARY SALES (FMS)	FFP	JUN 97	OCT 97	\$ 21.6M	SOLE SOURCE

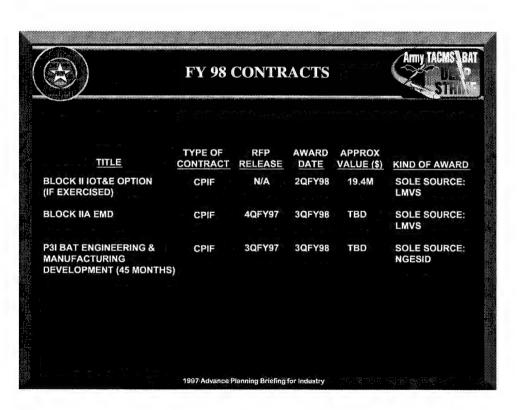




	FY	98 CONT	RACTS		
TITLE	TYPE CONTRACT	RFP RELEASE DATE	AWARD DATE	APPROX VALUE	KIND OF AWARD
MLRS LAUNCHER	CPFF	N/A	MAR 98	\$ 1.08	SOLE SOURCE/ LMVS
HIMARS ACTD INC FND	CPIF	N/A	JAN 98	\$ 3.4	SOLE SOURCE/ LMVS
M270A1 KITS (IFCS)	FFP	10 JUL 97	JAN 98	\$32.5	SOLE SOURCE/ LMVS
M270A1 KITS (ILMS)	FFP	N/A	JUL 98	\$ 35.7	SOLE SOURCE/ LMVS
GUIDED MLRS	CPIF	30 AUG 97	FEB 98	\$ 136.0	SOLE SOURCE/ LMVS
FDDM INTG OPTION	CPFF	N/A	FEB 98	\$ 2.2	SOLE SOURCE/ TEC MASTERS
ARMY TECH ARCHITEC	CPIF	30 SEP 97	FEB 98	\$ 5.0	SOLE SOURCE/ LMVS
ENGINEERING SVCS	CPFF	01 NOV 97	APR 98	\$ 16.0	SOLE SOURCE/





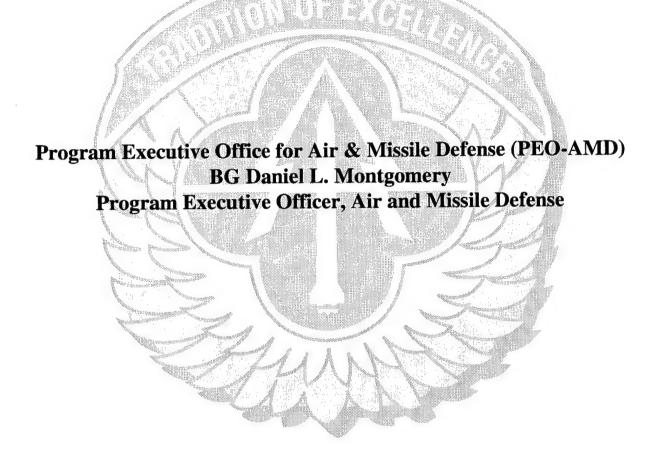


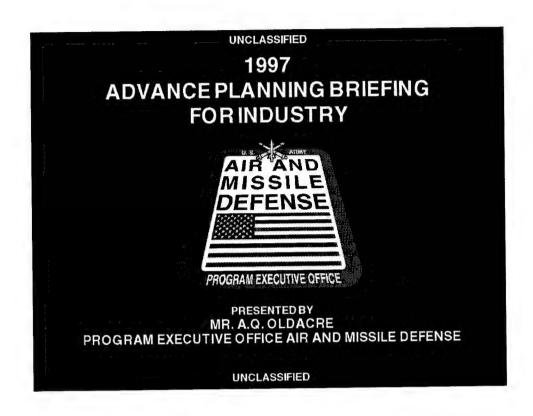


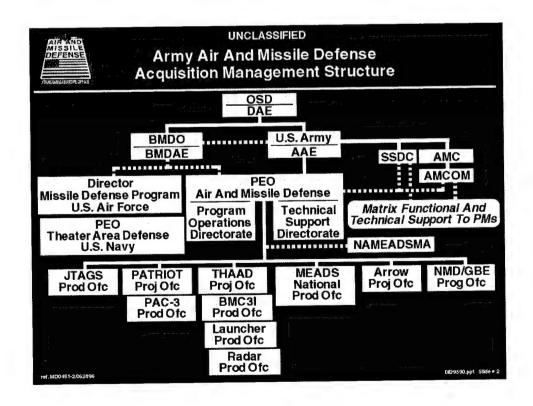
SUMMARY

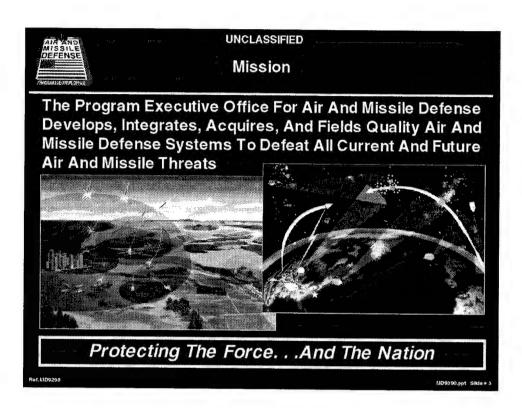
1997 Advance Planning Briefing for Industry

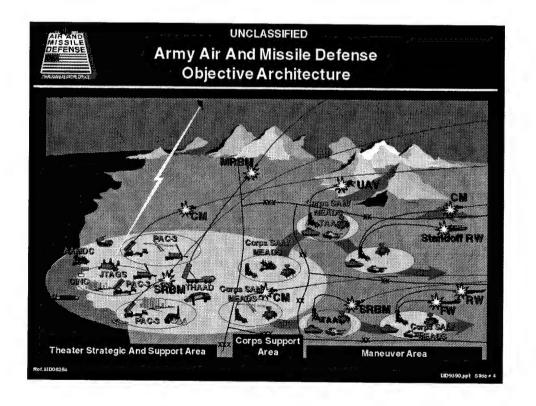
- TACTICAL MISSILES DEVELOPMENT AND PROCUREMENT PROGRAMS ON TRACK
- INTENSE COMPETITION FOR RESOURCES DRIVES HARD CHOICES
- LEVERAGING OTHER GOVERNMENT AND INDUSTRY INITIATIVES TO MEET THE ARMY'S NEEDS

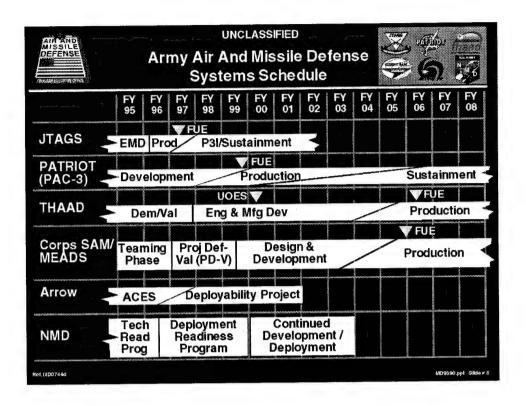


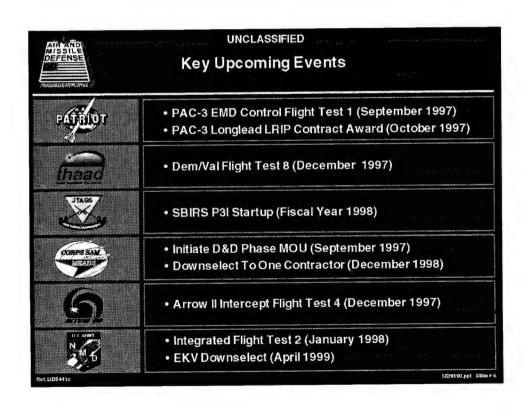


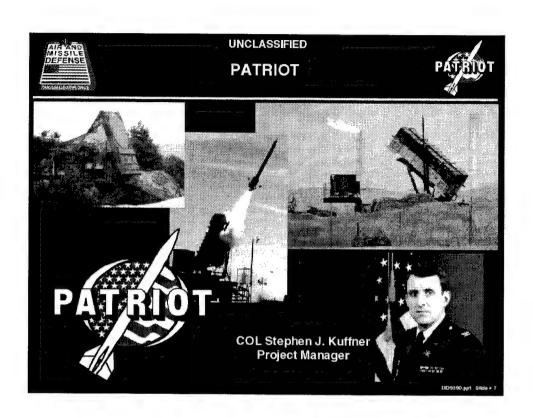


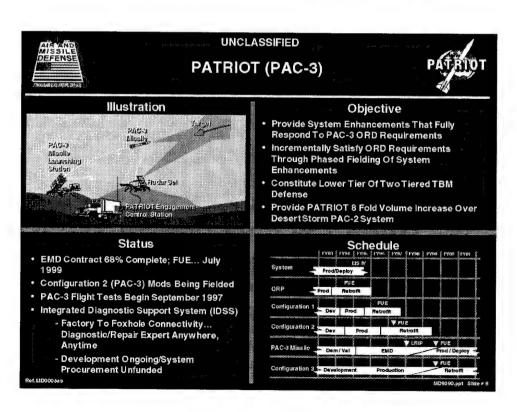














Contracting Opportunity



Contracting Opportunity

Remote Launch/Communications Enhancement Upgrade (LPA)

Estimated Value

\$16M-\$20M....FY98 Basic \$30M-\$35M....FY99 Option I \$13M-\$15M....FY00 Option II

Contract Point Of Contact Valeta Crandall (205-876-1109) Dan Beck (205-955-3576)

Contract Type

FFP

Kind Of Award Sole Source

Issue Draft RFP Issue Solicitation Contract Award

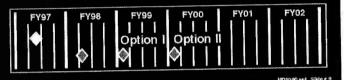
Program Description

Information Coordination Controls (ICCs), Engagement Control Station (ECS), Communications Relay Groups (CRGs) Upgrade Kits. CRG Shelters And Antenna Mast Groups (AMGs).

Contractor

Raytheon Company

Contractor Point Of Contact Jeff Hamel (617-274-4082)





UNCLASSIFIED

Contracting Opportunity

Contracting Opportunity

Radar Enhancement Phase III

Estimated Value

\$34M-\$37M....FY98 Basic \$34M-\$37M....FY99 Option I

\$34M-\$37M....FY00 Option II

Contract Point Of Contact

Valeta Crandall (205-876-1109)

Jim Pope (205-955-3576)

Contract Type

FFP

Kind Of Award

Sole Source

Program Description

Modification Kits With Installation. Basic Requirements Plus Two

Options.

Contractor

Raytheon Company

Contractor Point Of Contact

Dick Conti (617-274-3051)

Issue Draft RFP Issue Solicitation

Contract Award



MISSILE DEFENSE

UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity Classification, Discrimination And Identification 3 (CDI-3)

Estimated Value \$24M-\$26M....FY98 Basic \$12M-\$14M....FY99 Option I \$12M-\$14M....FY00 Option II

Contract Point Of Contact Valeta Crandall (205-876-1109) Jim Pope (205-955-3575)

ContractType **FFP** Kind Of Award

Sole Source

Issue Draft RFP Issue Solicitation **Contract Award**

Program Description CDI-3 Modification Kits With installation.

Contractor

Raytheon Company

Contractor Point Of Contact Bob Smith (617-274-3010)





UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity **FY98 Engineering Services**

Estimated Value S70M—\$80M \$60M-\$70M Option

Contract Point Of Contact Valeta Crandall (205-876-1109) Dennis Day (205-955-2378)

ContractType CPAF

Kind Of Award

Sole Source

Issue Draft RFP Issue Solicitation Contract Award

Raytheon Company Contractor Point Of Contact Steve Horlitz (617-274-1598) Option

Program Description

Level Of Effort Type Contract to Perform Engineering Services For

The PATRIOT Project Office.



Contracting Opportunity



Contracting Opportunity General Purpose Electronic Test Set

Estimated Value S1M-S3M....FY97 S1M-S3M....FY98

Contract Point Of Contact Valeta Crandall (205-876-1109) Gayle Frank (205-955-1089)

ContractType FFP

Kind Of Award Sole Source

Issue Draft RFP Issue Solicitation Contract Award

Program Description Fabricate For Delivery Of General Purpose Electronic Test Set (GETS) Test Program Set (TPS).

Lockheed-Martin Systems

Contractor Point Of Contact Robert Gustafson (205-722-2621)





Contracting Opportunity



Contracting Opportunity

Launcher Global Positioning System Input/Output Northfinding System

Estimated Value \$500K-\$1M

Contract Point Of Contact Valeta Crandall (205-876-1109) Todd Tran (205-876-9550)

ContractType **FFP**

Kind Of Award Sole Source

Issue Draft RFP

Issue Solicitation Contract Award

UNCLASSIFIED

Program Description

Retrofit Kits For U.S. And Kuwait With Options For Israel, Netherlands, And Saudi Arabia.

Contractor

Raytheon Company

Contractor Point Of Contact Bill Veno (617-274-4768)

Alfand Missile Defense

UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity
Low Voltage Power Supply (LVPS)
High Density Module

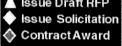
Estimated Value S500K-\$1M

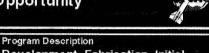
Contract Point Of Contact Valeta Crandall (205-876-1109) Vern Chance (205-955-3654)

ContractType FFP

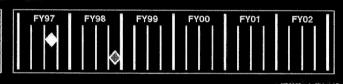
Kind Of Award Competitive - Full And Open

▲ Issue Draft RFP





Development, Fabrication, Initial Testing, Delivery, And System Test Support For The Redesign And Prove-Out Of Low Voltage Power Supplies For PATRIOT.



UNCLASSIFIED **Contracting Opportunity** Contracting Opportunity Program Description Anti-Cruise Missile (ACM) Option Exercise For ACM Materials For Test Support. Estimated Value Contractor S8M-S11M Raytheon Company Contract Point Of Contact Valeta Crandall (205-876-1109) Contractor Point Of Contact Bob De Rosa (617-274-2898) Richard Brown (205-955-3806) ContractType **CPIF** Kind Of Award Sole Source ▲ Issue Draft RFP Issue Solicitation Contract Award



Contracting Opportunity



Contracting Opportunity PAC-3 Missile IPF

Estimated Value S18M-\$20M

Contract Point Of Contact Valeta Crandall (205-876-1109) Larry Easterwood (205-955-3577)

ContractType FFP

Kind Of Award Sole Source

Issue Draft RFP Issue Solicitation Contract Award

Program Description Initial Production Facilities (IPF) Required To Produce PAC-3 Missiles

Lockheed-Martin Vought Systems

Contractor Point Of Contact Charlie Simpson (972-603-2807)





UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity
PAC-3 Missile Low Rate Initial Production (LRIP)

Estimated Value \$120M-\$130M

Contract Point Of Contact Valeta Crandall (205-876-1109) Larry Easterwood (205-955-3577)

ContractType **FFP**

Kind Of Award Sole Source

Issue Draft RFP Issue Solicitation Contract Award

Program Description LRIP Of 60 PAC-3 Missiles, 11 **Enhanced Launcher Electronic** Systems (ELESs), and 9 Fire Solution Computers (FSCs)

Contractor

Lockheed-Martin Vought Systems

Contractor Point Of Contact Charlie Simpson (972-603-2807)



Contracting Opportunity



Contracting Opportunity LRIP Of PAC-3 Missile

Estimated Value \$7M-\$10M

Contract Point Of Contact Valeta Crandall (205-876-1109) Dan Beck (205-955-3576)

ContractType **FFP**

Kind Of Award Sole Source

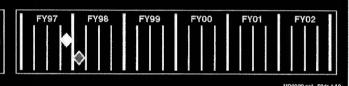
Issue Draft RFP Issue Solicitation Contract Award

Program Description

LRIP Of PAC-3 Missile Integration/ Configuration 3 Upgrade Hardware.

Raytheon Lockheed-Martin Vought Systems

Contractor Point Of Contact Jay Mortimar (617-274-1836)





UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity PATRIOT Independent Integration **Analysis**

Estimated Value

S 4M-\$ 6M...FY97

\$15M-\$20M....FY98 Option I \$15M-\$20M....FY99 Option II \$15M-\$20M....FY00 Option III \$15M-\$20M....FY01 Option IV

\$10M-\$15M....FY02 Option V

Contract Point Of Contact Janice Daniels (205-876-7321) Jim Pope (205-955-3575)

ContractType **CPFF**

lssue Draft RFP Issue Solicitation

Contract Award

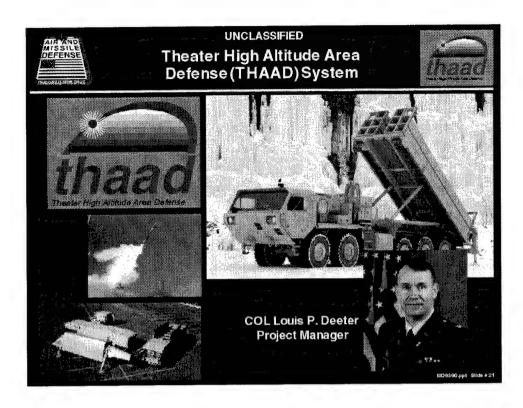
Kind Of Award Small Business Set Aside

Program Description

Independent PATRIOT System Engineering Integration Analyses Of The PATRIOT Derivatives. SETA Support For PATRIOT Project Office. Basic Requirements Plus Options.

Contractor CAS, Inc.

Contractor Point Of Contact Jack Rissé (205-895-8629)





Contracting Opportunity



Contracting Opportunity
THAAD User Operational Evaluation System (UOES)

Estimated Funding S190M-\$195M

Contract Point Of Contact W.L. Schick (205-955-3044)

Contract Type **CPFF**

Kind Of Award

Exercise Of Existing Contract Option

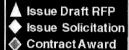
Program Description

Contract Option To Manufacture, Integrate, Assemble, Ground Test, And Deliver 40 Missiles For The **THAAD User Operational Evaluation** System (UOES).

Contractor

Lockheed-Martin Missile And Space

Contractor Point Of Contact Perry Bakke (408-756-7669)







UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity

THAAD Engineering Manufacturing And Development

Estimated Value

\$340M-\$350M....FY99 \$340M-\$350M....FY00 \$340M-\$350M....FY01

Contract Point Of Contact

W.L. Schick (205-955-3044)

ContractType

CPAF

Kind Of Award Sole Source Program Description

The THAAD System Is The U.S. Land-Based Upper Tier TMD System. The High Altitude And Wide Area Protection Furnished By The THAAD System Will Complement The Lower Tier Systems.

Contractor

Lockheed-Martin Missile And Space

Contractor Point Of Contact

Perry Bakke (408-756-7669)

Issue Draft RFP Issue Solicitation Contract Award



Contracting

UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity
Software Independent Verification
And Validation (IV&V)

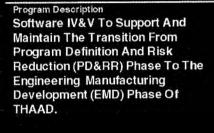
Estimated Value S90M-\$110M

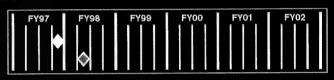
Contract Point Of Contact W.L. Schick (205-955-3044)

ContractType CPAF

Kind Of Award Small Business Set Aside

▲ Issue Draft RFP◆ Issue Solicitation♦ Contract Award





Program Description

Tech Masters, Inc.

Contractor



UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity
Simulation/Hardware-In-The-Loop
(HWIL) Development

Estimated Value \$40M-\$50M

Contract Point Of Contact W.L. Schick (205-955-3044)

ContractType CPAF

Kind Of Award Sole Source 8(a) Award

Sole Source 8(a) Awa

▲ Issue Draft RFP
 ◆ Issue Solicitation
 ◆ Contract Award

Contractor Point Of Contact
Frank Jennings (205-721-6613)

FY98 FY99 FY00 FY01 FY02

Scientific, Engineering, Analysis,

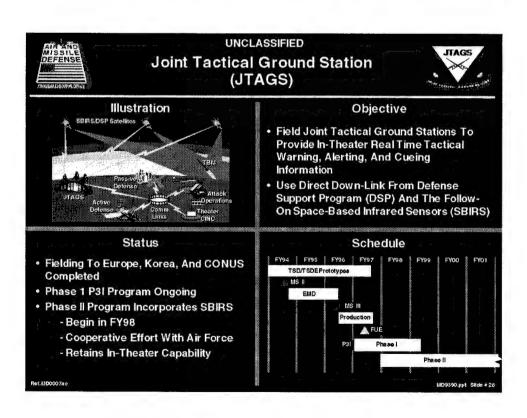
And Technical Efforts To Design, Continue To Develop, Fabricate, And

For The THAAD System.

Test Simulations, Drivers, And HWIL

MD9390.ppt Slide #2







Contracting Opportunity



Contracting Opportunity
Space Based Infrared System (SBIRS) Multi-Mission Mobile Processor (M3P)

Estimated Value

S20M-\$25M (FY98-FY03)

Contract Point Of Contact

Zane Smith (205-722-1142)

ContractType

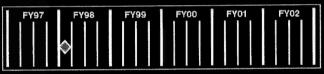
CPAF

Kind Of Award Sole Source Option Exercise Under AF Contract F04701-95-C-0017

Air Force Space Based Infrared Systems (SBIRS) High Component **Endurable Element**

Issue Draft RFP

Issue Solicitation Contract Award





UNCLASSIFIED

MEADS















LTC Richard P. De Fatta **Product Manager** U.S. MEADS **National Product Office**

Signing of Memo of Understanding by Representatives from United States, Germany, and Italy.



MEADS



Illustration



Objective

- 360° Protection Against TBMs, CMs, And Other Air BreathingThreats (ABTs)
- Transportability Consistent With Contingency Operations
- Mobility Consistent With That Of The Maneuver Force
- Highly Survivable And Operationally Versatile Netted And Distributed Architecture
- Lower Manpower Requirements Than Current Systems

Status

- NAMEADSMA Charter Approved June
- Program Definition/Validation Phase With Two International Partners Underway
 - Down Select In December 1998
- Funding In Place To Begin Design And Development Phase
- POMissues



CLOSEHOLD

Contracting Opportunity



Contracting Opportunity
Design and Development

Estimated Value In Excess of S1B

Contract Point Of Contact U.S. MEADS National Product Office (205-895-4080)

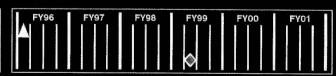
ContractType

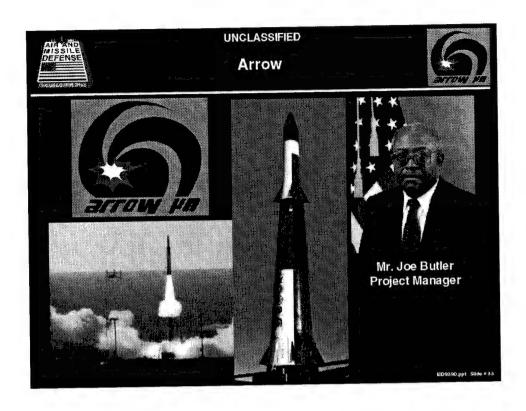
CPIF

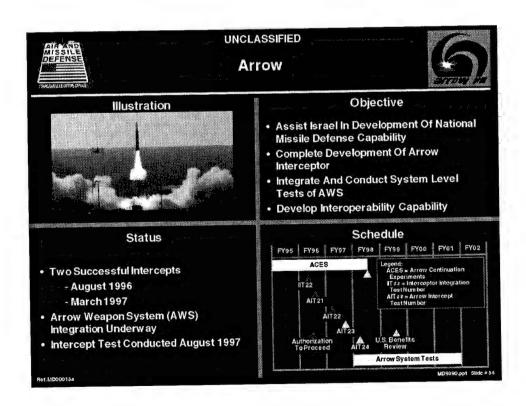
Kind Of Award **Limited Competition** Program Description

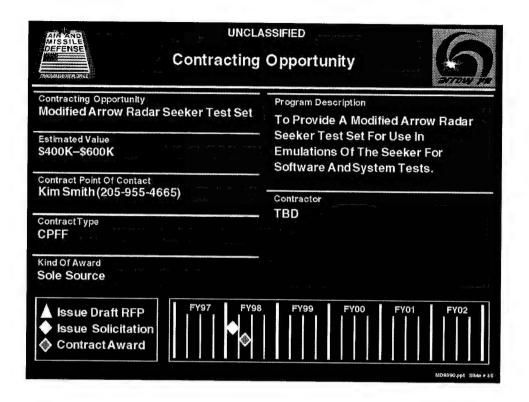
MEADS Provides Protection Of The Maneuver Forces. MEADS Defends Critical Assets And Forces Of Both The U.S. Army And U.S. Marine Corps By Providing Robust Defense Against Mass Casualty And Mass Destruction Producing Weapons Such As Cruise Missiles And Short Range Ballistic Missiles.















NMD/Ground Based Element Program



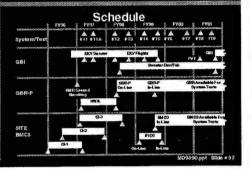


Objective

- Develop And Test Elements Of Initial NMD System Within 3 Years
- Support Capability To Deploy Within 3 Years Of Decision
- Conduct Integrated System Test At USAKA In FY99

Status

- · Joint Program Office Established 1 April 1997
- · First EKV Sensor Flight Test Successfully Conducted 23 June 1997





UNCLASSIFIED

Contracting Opportunity



Contracting Opportunity
NMD Lead Systems Integration **Execution Phase**

Estimated Value TBD - Based On Industry Approach

Contract Point Of Contact Mr. Alex Austin At BMDO (703-604-4288)

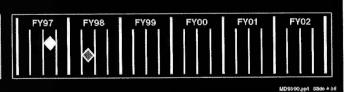
ContractType CPAF/IF

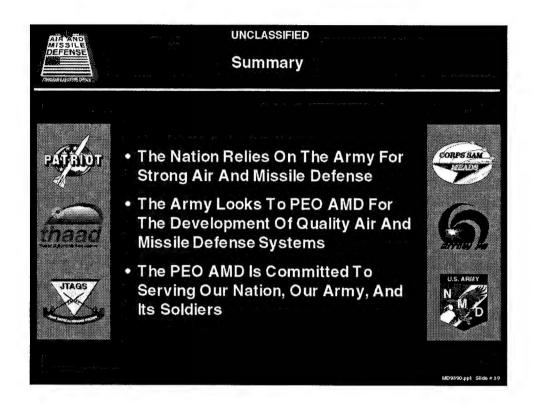
Kind Of Award **Limited Competition** Program Description

Design, Develop, Integrate NMD System. Prepare For FY99 Integrated Test. Prepare To Deploy.

Issue Draft RFP Issue Solicitation

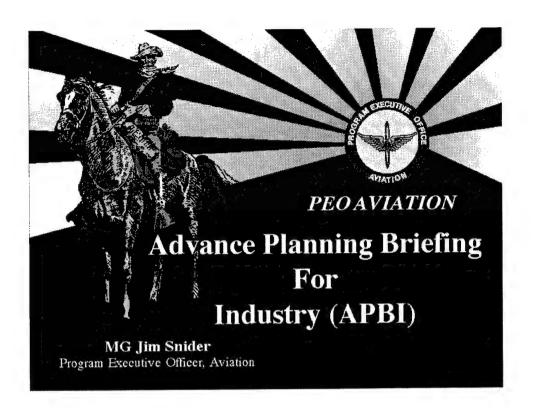








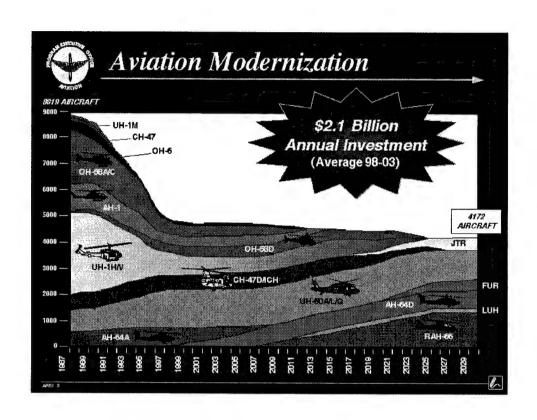


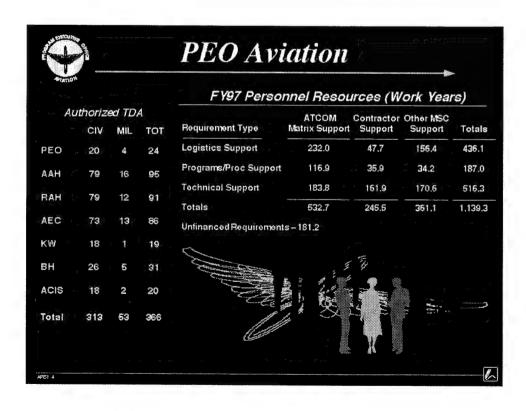




PEO, Aviation Goals

- Modernize Army Aviation for Least Cost IAW Army Vision 2010
 - Leverage Acquisition Reform, Science & Technology, Recapitalization, Contractor Logistics Support
- Ensure Required Aviation Systems Are Ready and Equipped for FY00 Digitized Division
 - Longbow Apache
 - Kiowa Warrior
 - Army Airborne Command and Control System (A2C2S)







Long Term Benefits of Huntsville Relocation

- Increased Cooperation/Synergy from Collocation of:
 - Aviation & Missile PM's
 - AMCOM Combined Aviation & Missile RDEC Elements
 - AMCOM Combined Comprehensive Support Structure
- Redstone Arsenal On-Site Advantages
 - Airfield & Aviation Facilities
 - Test & Evaluation Facilities
 - Software Engineering Directorate
 - Systems Simulation & Development Directorate

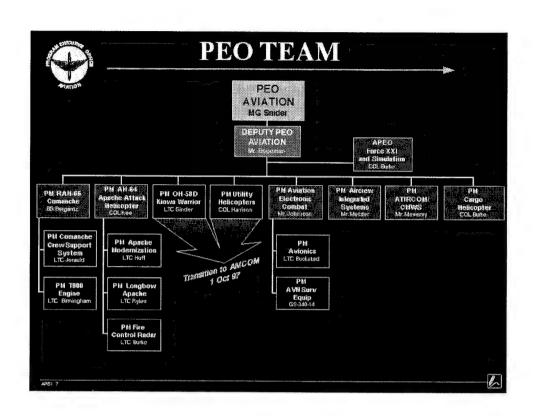


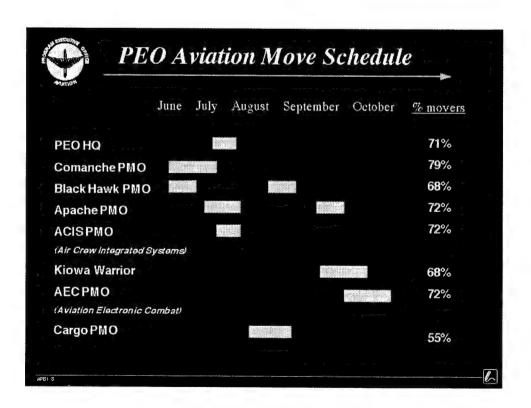


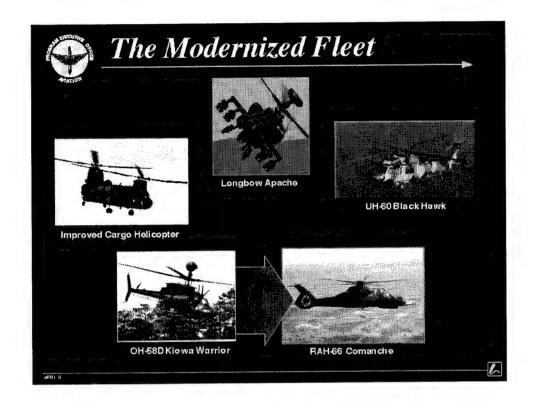
Long Term Benefits of Huntsville Relocation (Cont'd)

- · Ready Access to:
 - Missile Defense Battle Integration Center
 - NASA Talent and Facilities
 - TMDE and LOGSA Activities
 - Numerous High Tech Industry & Support
 Contractors Located in Huntsville
- Close Proximity to USAAVNC & Ft. Rucker

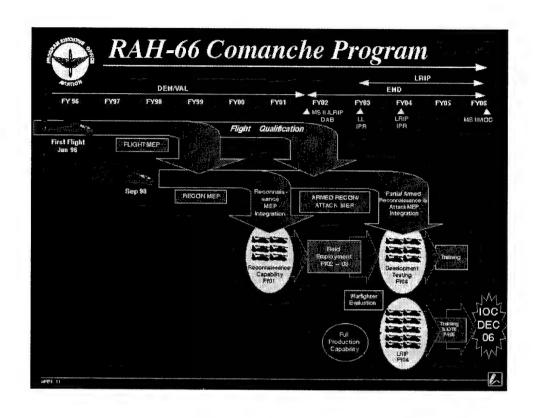
P

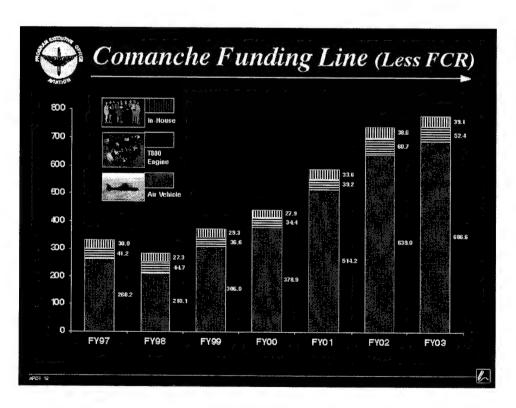


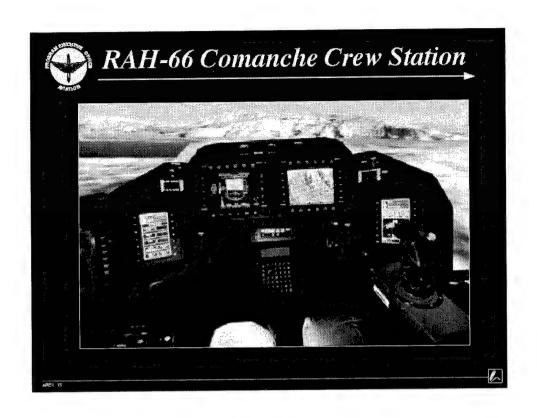


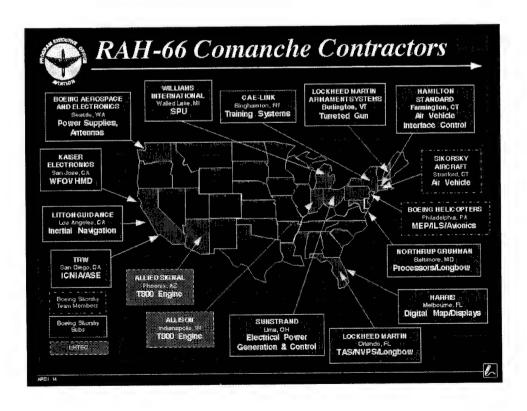


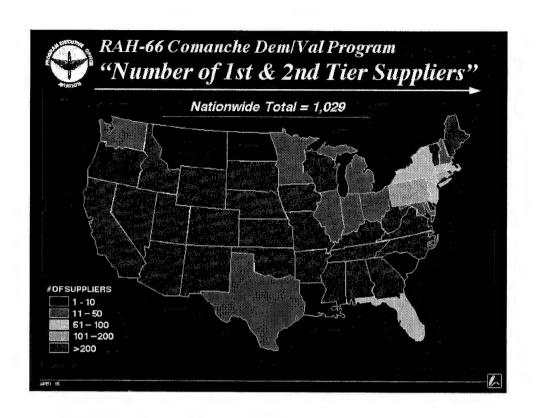


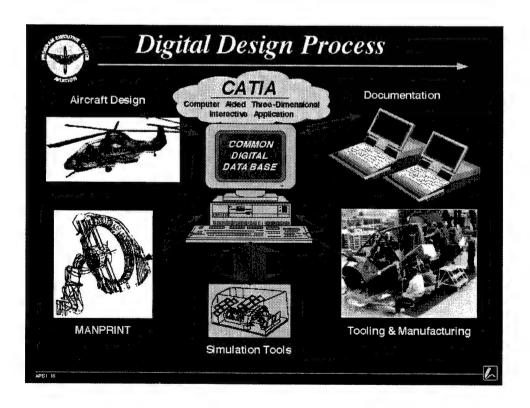




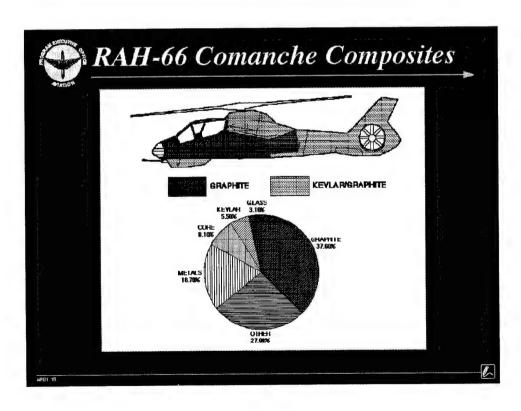


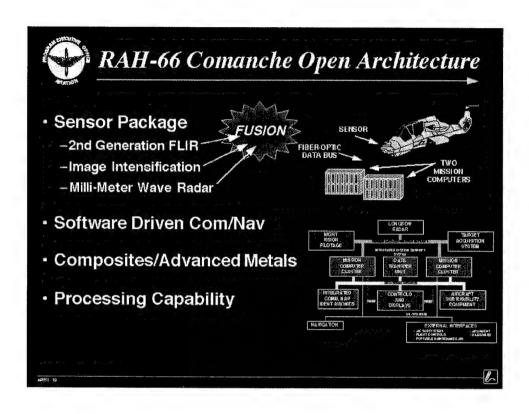


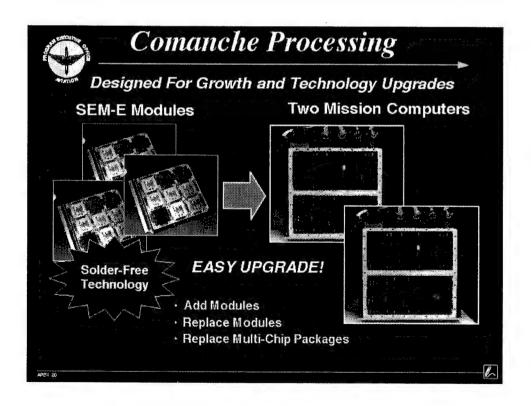


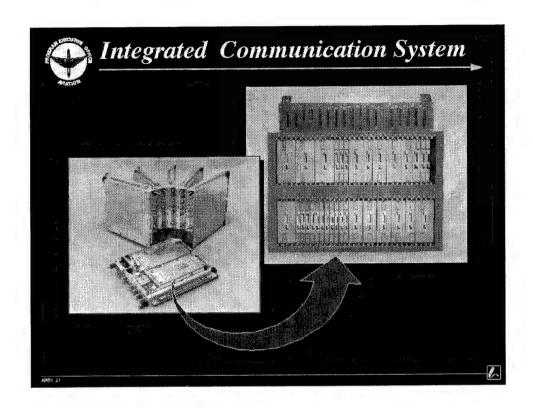


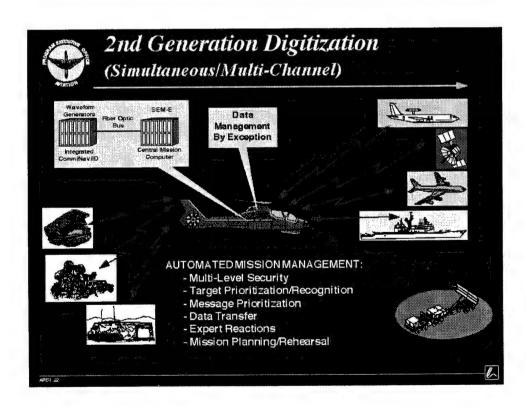














Science and Technology Support

Comanche Technology Challenges Status (3-6-97)

No.	Top 9 Tech Challenges	Assigned Government Organization	Status	Technology issue
1.	High Temperature Composite Materials	AVRDEC-AATD (Phil LeFerriere) 757-878-3977	B	Current Shafts within Firewall are Subject to Failure Due to Heat or Fire. Need Low Cost/Lightweight High Temperature (>1100 Deg.F) Drive Shaft.
2.	LO Canopy Transparency	AVRDEC-AATD (Mac Dinning) 757-878-2561	Y	Multiple Scatter Between Rotor and Canopy Dominates Dynamic Signature at Some Viewing Aspects
3.	Lightweight, Ballistic Armor	AVRDEC – AATD (Kent Smith) 757-878-5875	Ŷ	Existing Armor Technology Will Not Provide Ballistic Protection At Desired Low Aeria! Density
4.	Helmet Mounted Flat Panel Display	NVSED (Howard Kessler) 703-704-1382	Y	Need For High-Light-Throughput Operation Integrated Heater Element, and Full MIL Ruggedization
5.	Paint (IR, Visual, etc.)	AVRDEC AATD (Mac Dinning) 757-8787-2561	Ŷ	Current Baseline MIL-SPEC 46186 Alrcraft Green Paint Does Not Meet Comanche Established Requirement
6.	LO Dielectric/High Strength Materials	AVRDEC – AATD (Mac Dinning) 757-878-2561	w	Material Design Required to Overcome High Frequency Skin Limitations and Improve RCS Performance Over Baseline Skin



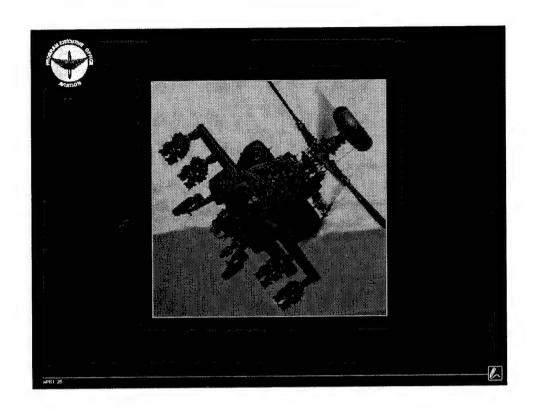
Science and Technology Support (Cont'd)

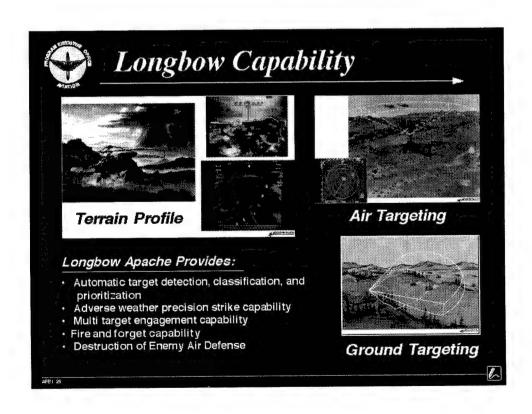
Comanche Technology Challenges Status (3-6-97)

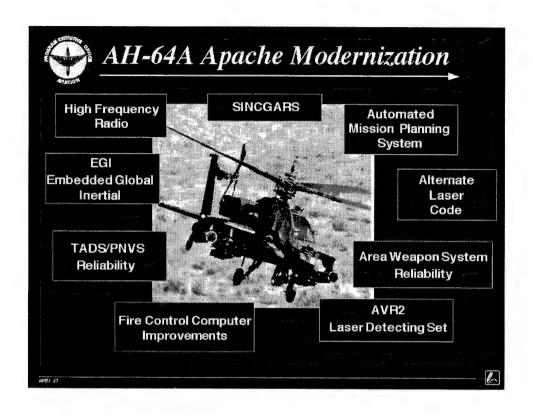
No.	Top 9 Tech Challenges	Assigned Government Organization	Status	Technology Issue
7.	Aluminum Beryllium/Lithium Aluminum	AVRDEC-AATD (Michael Galvas) 757-878-5732	₿	Corrosion Protection Coating Technology and Methods For Application of Coatings
8.	Regime Recognition, Safe-Life and Damage Tolerance (Usage Monitoring)	AVRDEC (Jack Tanney) 757-878-5602	₿	Regime Recognition Integration and Risk Reduction/Regime Recognition Application to Usage Monitoring
9.	ECS/Regenerative Filters	AVRDEC AATD (Kevin Nolan) 757-878-5875	W	Current Press ure Swing Absorber (PSA) Filter Failed to Meet Established Performance Requirement

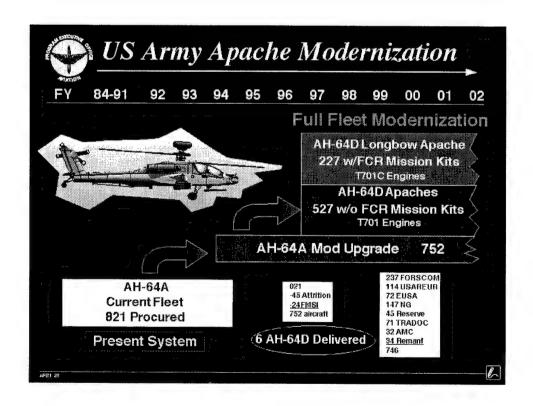
nDEL 3

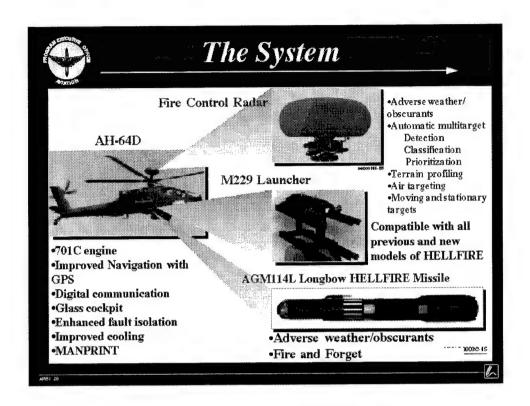
1

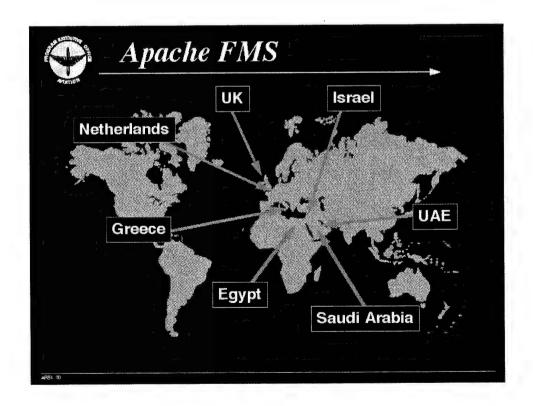










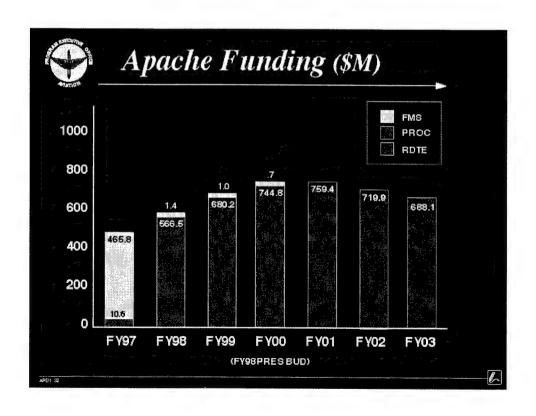


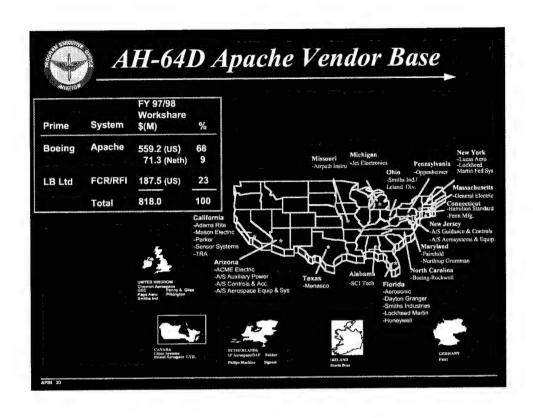


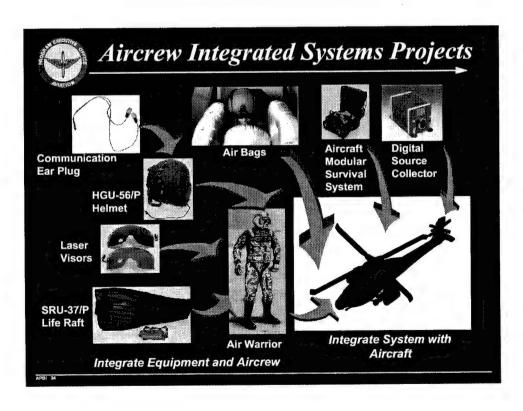
Apache Challenges

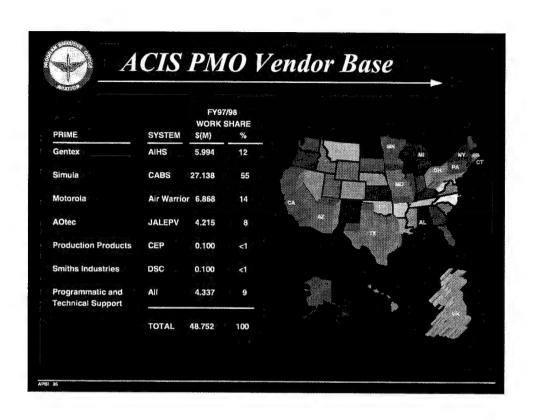
- · Top five technical:
 - -Improved Sensors
 - Digitization
 - Software Acquisition/Support
 Under Commercial Practices
 - Propulsion / Drive Train Upgrades
 - Airframe Life Extension

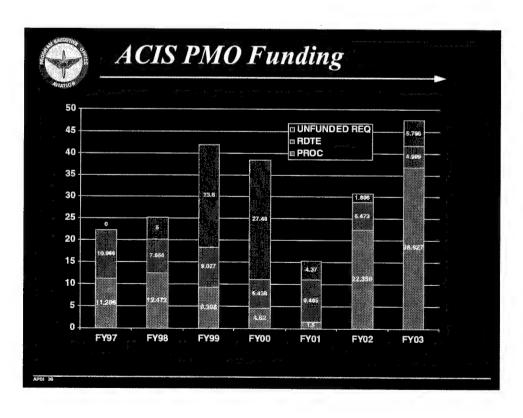
1









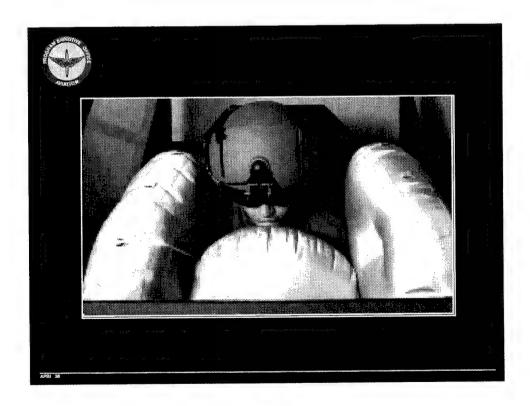


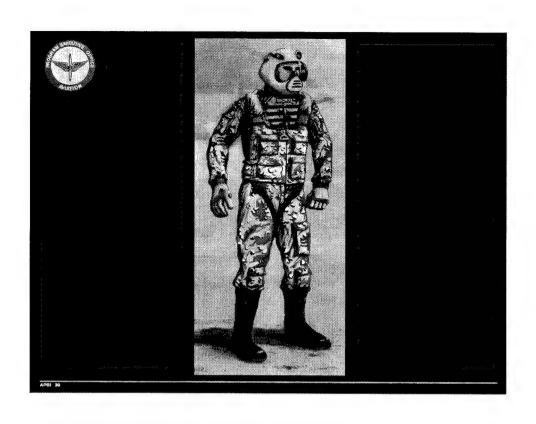


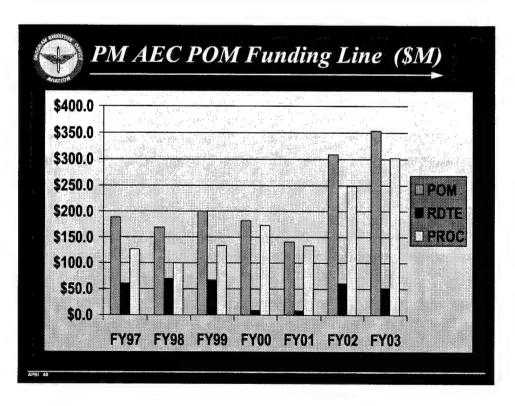
Future Technology Needs

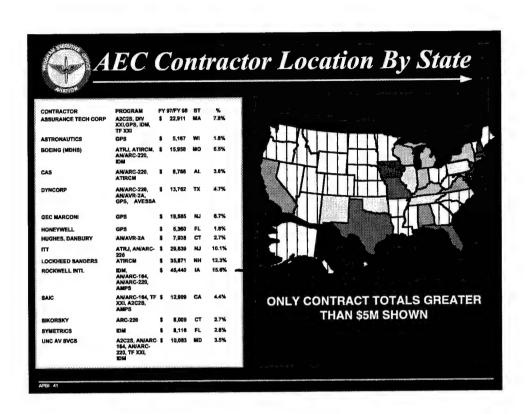
- Light Weight Helmet Mounted Display Components
- Air Bag Gas Generators
- Weight and Bulk Reduction
- Heat Stress (Eliminate) for Air Warrior
 Components
- Significant O & S Savings from Digital Source Collector

APBI 7









WATER OF	(TOTALS LESS THAN \$5.0M)										
		0001100111001110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	uuntuuss				unnan	////		
CONTRACTOR	PROGRAM	FY 97/FY 98	ST	* 1	CONTRACTOR	PROGRAM	FY 97/FY 98	81	%		
AEL INDUSTRIES	AN/ARC-184	\$ 70	PA	0.0%	LEGAD - RAYTHEON E SYS	AN/ARC-226	\$ 5,424	KY	6.7%		
ALLIED BIGNAL	A2C28 TF XXI	8 2,159	MD	0.4%	LITTON	AMPS	\$ 424	CA	8.1%		
ARING	ARC-220	3 550	MD	0.1%	LOCAL ECONOMY (ST LOUIS)	TF XXI	\$ 201	80	9.0%		
BELL HELICOPTERS TEXTRON	AN/ARC-220	1.000			LOCKHEED MARTIN FED	AN/ARC-220,		7			
ROPING RIKORSKY A/C SUPT	AWARC-228	\$ 4,000	ΤX	0.8%		IDM	\$ 2,270	NY	0.4%		
CAMBER	ATEL ATERCM	\$ 100	TN	0.8%	LOCKHEED MARTIN LOG	AN/ARC-220,			9.2%		
	TF XXV				MANTECH	ARC-220	1,119	TX			
CORRO	GPS	\$ 402	AL	0.1%	MNEMONICS INC	ASCSR	\$ 530	WJ	6.1%		
		\$ 31	ш	0.8%			\$ 700	VA	0.1%		
COLEMAN RESEARCH CORP	TF300	1 124	PL.	0.0%	MATIONS INC	AMPS, AN/ARC- 226, GPS, IDM					
COMPUTER SCIENCE CORP	AMPS, ANIARC-				BC#	AMPA	\$ 1,212	N	0.2%		
	220	1 3,417	VA	0.7%	•••	1DIA	\$ 2,450	AL	0.6%		
DATA INC	TF XXX	\$ 133	MO	0.0%	SMITEM INID	ANPS, GPS	\$ 2,037	241	8.4%		
ENGINEERING & PROFESSIONAL S	YCS AMPS, ATRJ	\$ 315	N.A	0.1%	en:	A2G28, DEV XXX.					
FINERTEC	ATERCH	\$ 116	W	0.0%		TF XXII	\$ 4,460	FL.	0.9%		
HUGHES DEFENSE COMM	AN/ARC-184	8 3,801	184	0.7%	THIOKOL	ARCMH	\$ 2.780	41	0.5%		
HT RESEARCH SISTITUTE	ANIARC-220	a 2,001	144	9.72	UNC LEAR SERVICES, INC.	AN/ARC-184,	,-				
	AMARC 226	\$ 366	٠.	0.4%		ANIARC-220	\$ 24	OK	0.0%		
INHOVATIVE CONCEPTS INC	ANIARC-IZE, EM		VA.	0.7%	VITRONICS	IDN	¥ 439	w	0.5%		
		,430			WESTAR	TF XXX, ANIARC					
HEYBICON	ANIARC-228	1 346	HD	0,1%		220, ATRJ, GPS, IDM					
							\$ 1,190	1100	8.2%		



Program Facts

Technology

- CMWS

Passive Missile Warning

- ATIRCOM

Laser Based IR Countermeasures

Funds

Total

- RDT&E

\$408M (US \$100M, USAF \$245M, USN \$62M)

- Production

\$2,110M (USA \$1,203M, USAF \$570M, USN \$335M)

- Total

\$2,375M

Quantities

- Platforms

6

B-Kit: Sanders - Lockheed Martin

- CMWS

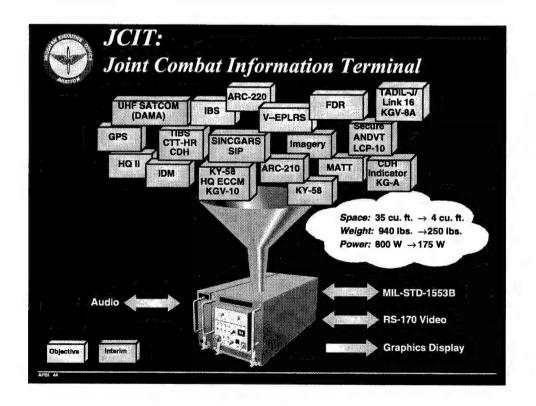
1858

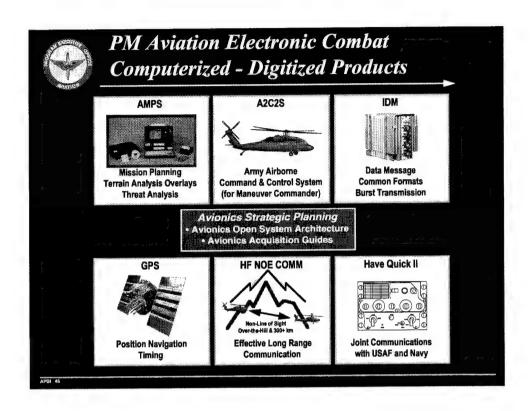
Group A Integration: Each Platform

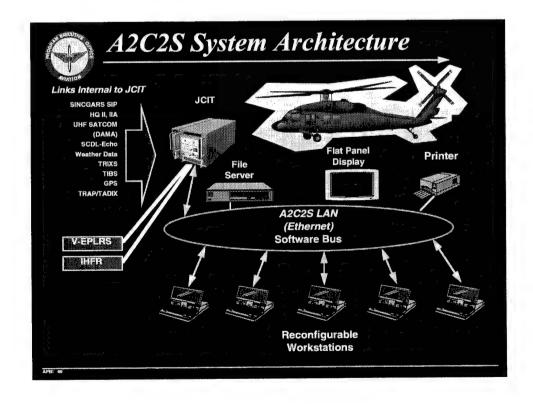
Prime

- ATIRCOM

APBI 43









Total Production Funding

(TY \$ in Millions)

FY98 PB

	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
Army	9.2		12.0	28.7	28.7	80.7	84.5	959.8	1203.6
Air Force			7.8	28.3	51.9	76.7	105	301.1	570.8
Navy			15.4	38.7	31.1	43.7	49.4	157.2	339.9
Total	9.2		35.2	95.7	111.7	201.1	238.9	1418.1	2109.9

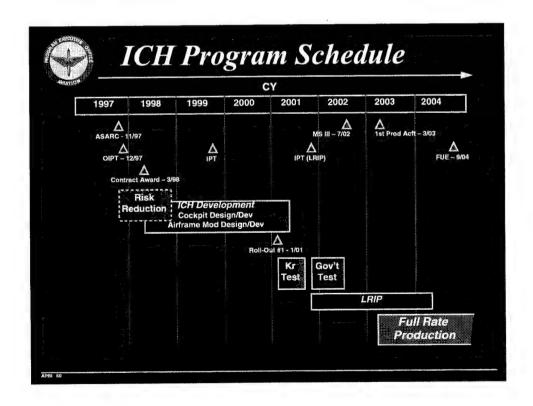
ADRI A



Science and Technology Support

No.	Technology Challenge	Assigned Gov't Organization	Status	Technology Issues		
1.	Broad-Band Laser Sources For Infrared Missile Jamming	NVESD (Dr. Joe O'Connell) 908-427-4870	0	Current Lasers Operate Naturally at Only a Few Specific Wavelengths in the Infrared		
2. Integrated Obstacle Avoidance System		NVESD (Dr. Joe O'Connell) 908-427-4870	9	In Order to Detect and Avoid Wires at NOE, a High Repetition Rate Laser Radar Technology is Required		
3.	Micro-Electronic Miniaturization	CECOM RDEC ? ?	8	Electronics That Can Withstand Extreme Military Environments		
4.	Increasing Antenna Effectiveness	CECOM RDEC (John Prorok) 732-427-3548	8	The Close Proximity of Many Antennas on Platforms Results in "Co-Site" Interference Problems		







Current ICH Program Funding

Then Year \$

MS II

MS III 1st Delivery

FY	97	98	99	00	01	02	03	To Complete	Total
RDT&E	17.5	2.6	28.8	31.3	6.1	0	-	0.0	86.3
Procure	21			6.1	72.0	229.7	235.7	2,595.6	3139.1
Sub Total	17.5	2.6	28.8	37.4	78.1	229.7	235.7	2,595.6	3225.4
Quantity						18	21	261	300

- 1. Congressional Marks to FY98 Budget 20-3M
- 2. Possible POM Changes to Program By Army

APBI 5



Service Life Extension Program SLEP/ICH

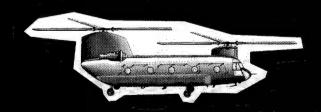
CH-47 Sustainment

DEFICIENCIES

- Rising O&S Costs and Readiness at Risk
- Avionics/Electronics
- Lift Performance

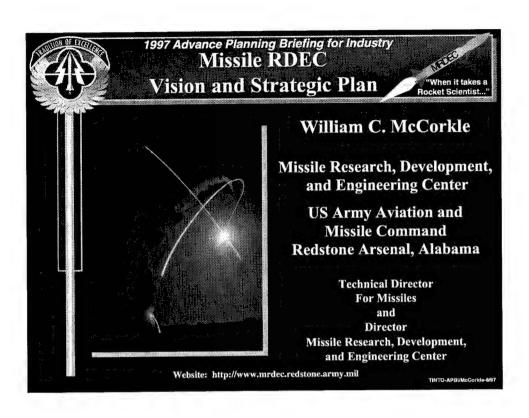
SOLUTION

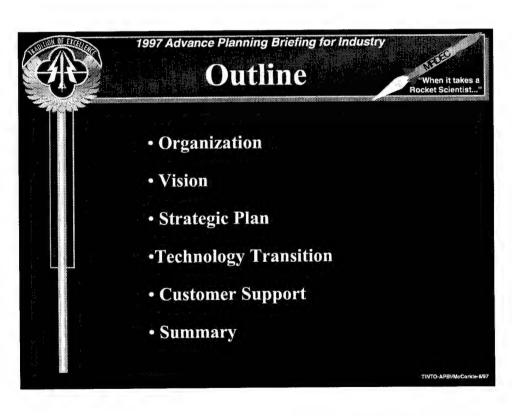
- Vibration Reduction and Overhaul/Remanufacture
- Modernize to Digitization Capability
- Engine Conversion From 712 to 714 with FADEC

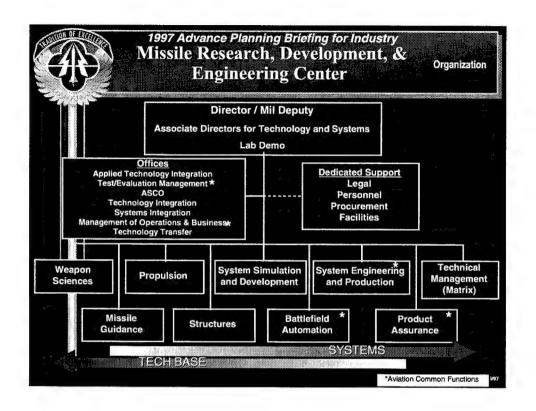


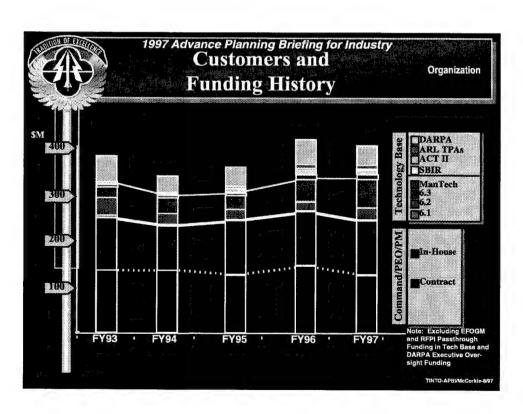
APBI 52

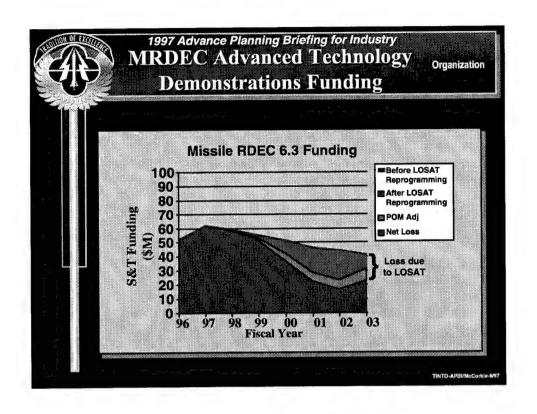


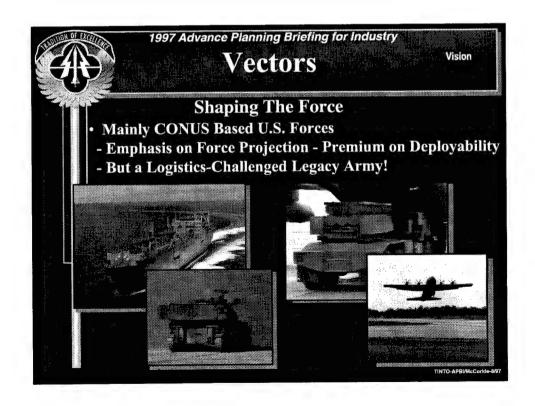


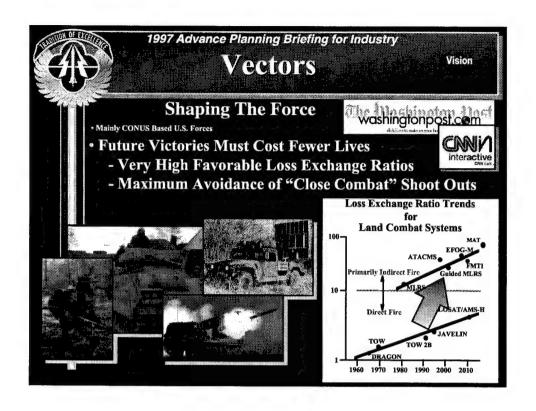


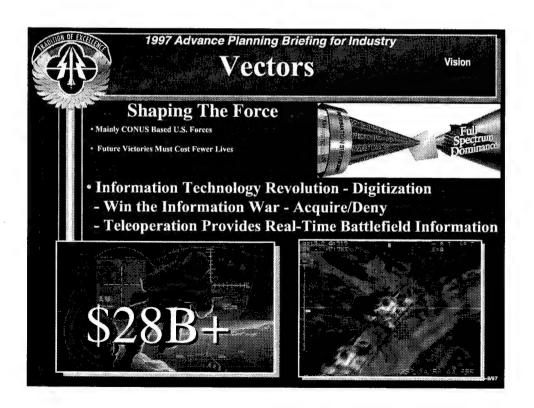


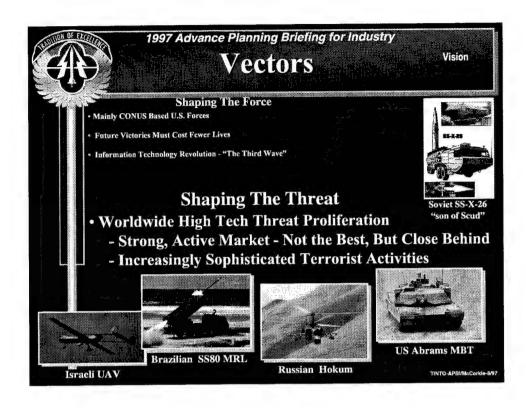


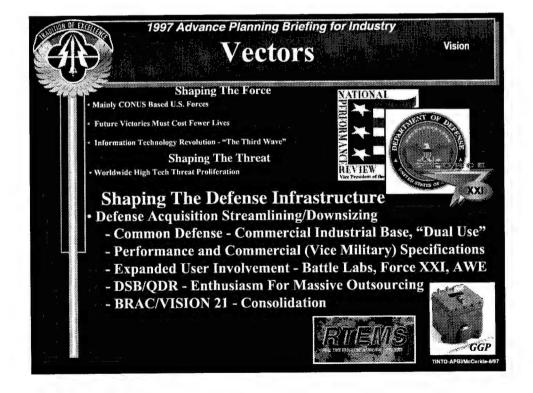


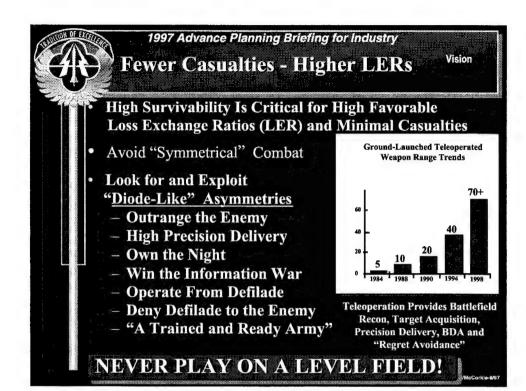


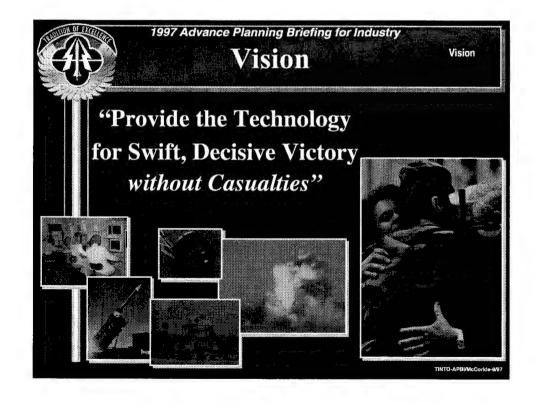


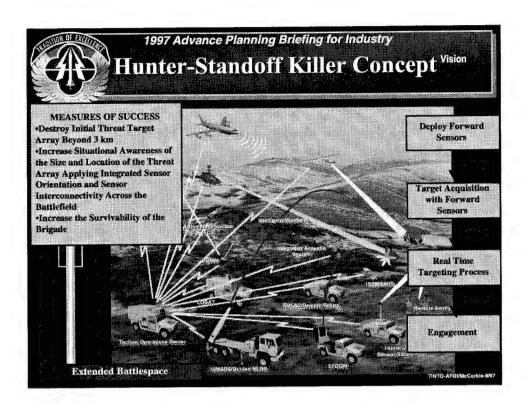




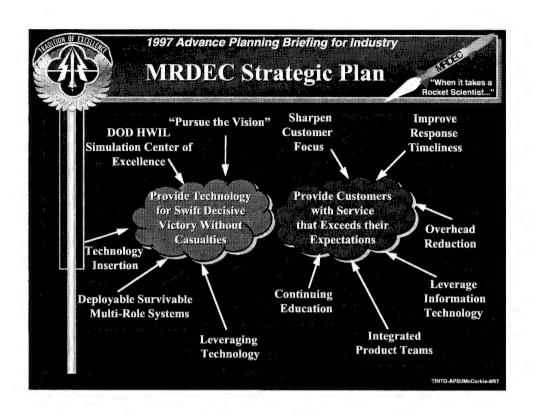


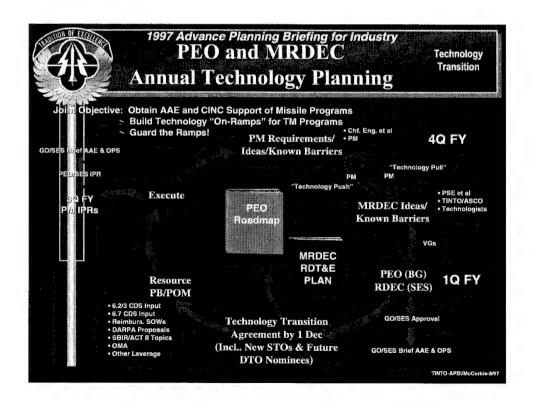


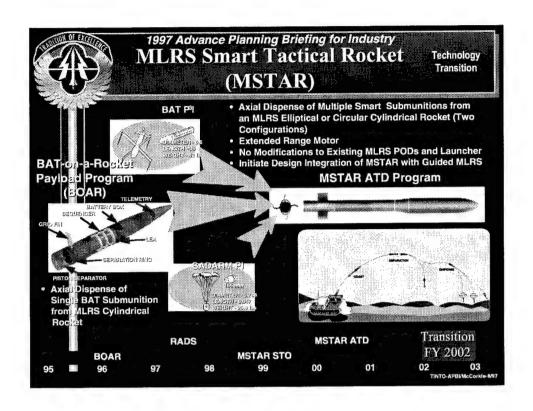


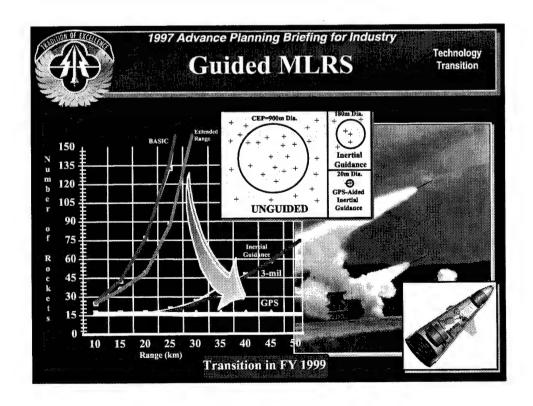


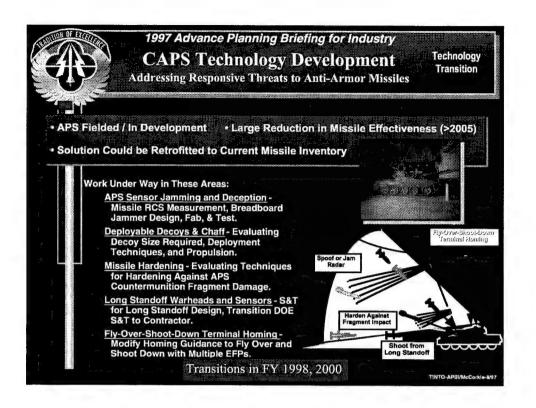


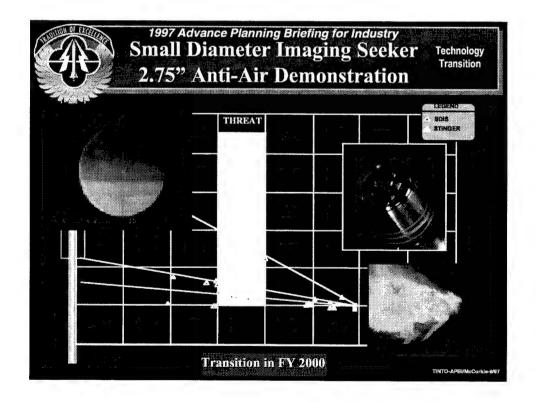


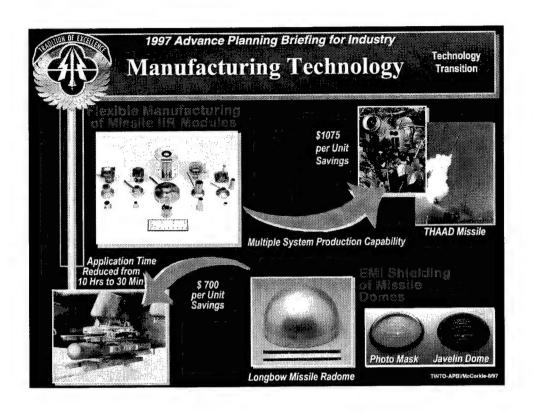


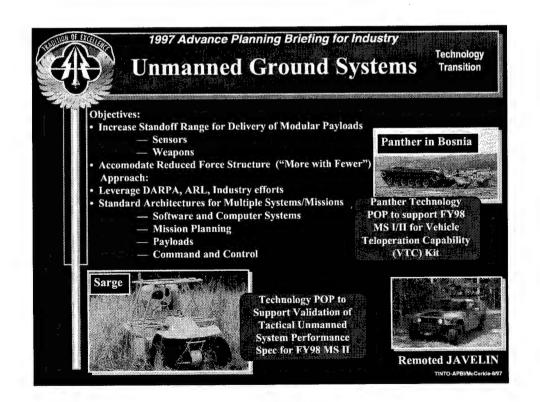


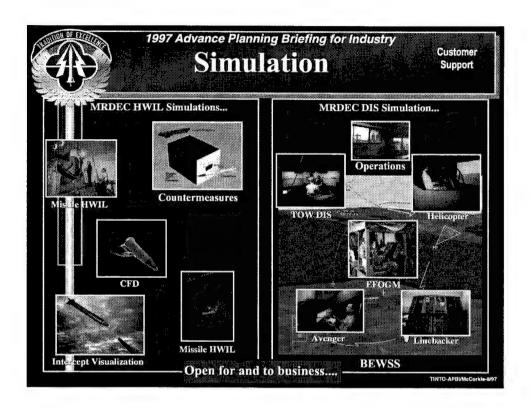


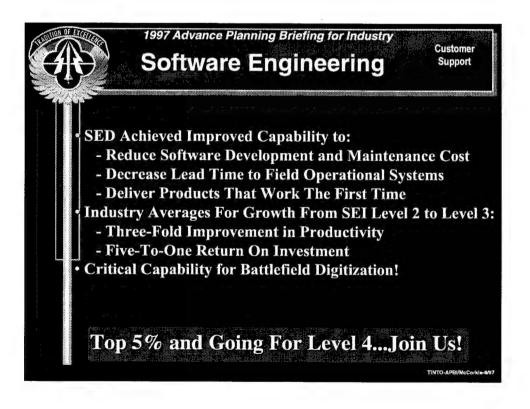


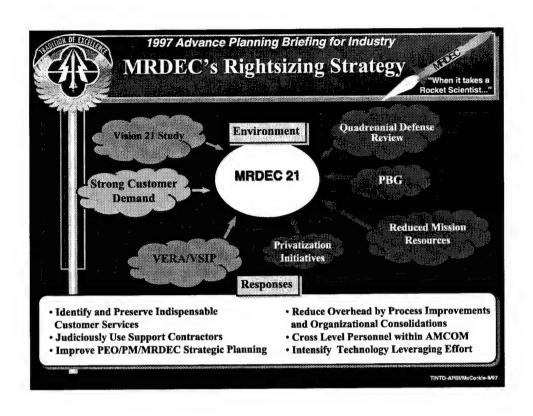


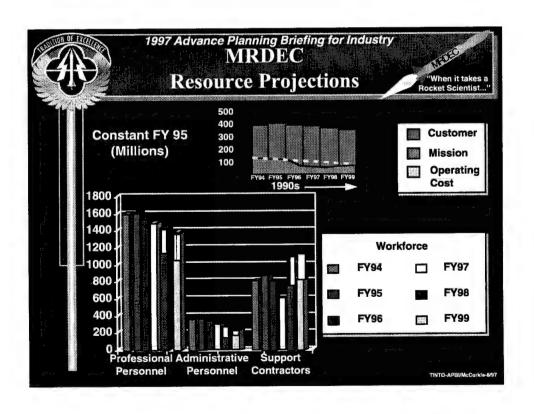














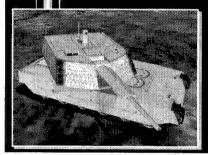
1997 Advance Planning Briefing for Industry

Summary

"When it takes a Rocket Scientist...

Well-Positioned for the Future

- MRDEC's Product Lines are Key to a Survivable Force Projection Army
 - Develop and Transition Technology
 - Support Customers









JS Army Aviation and Missile Command Aviation Research, Development and Engineering Center (AVRDEC)





Presentation at 1997 AMCOM Advance Planning Briefing to Industry

21 October 1997



Mr. Thomas L. House

Executive Director, AVRDEC

1997 Advance Planning Briefing for Industry

87lda-



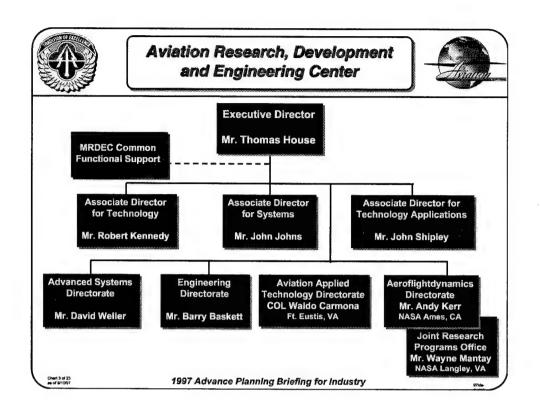
Agenda

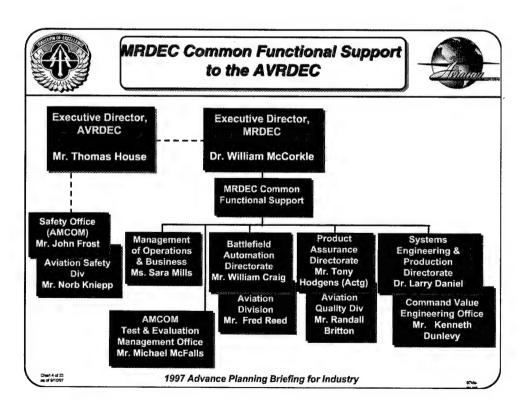


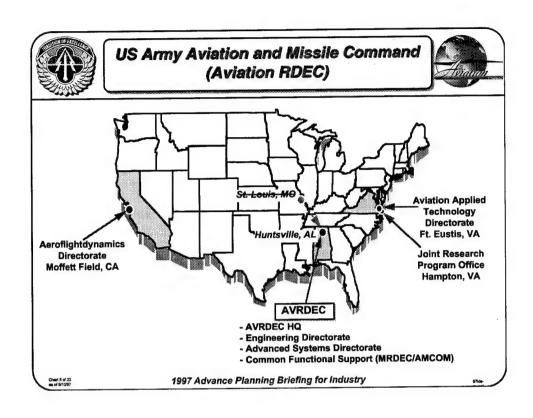
- —Evolution of the AVRDEC under AMCOM
- —Focusing Rotorcraft S&T for Army After Next
- —The Aviation O&S Cost Reduction Challenge
- —Realigning the Aviation S&T and Engineering Processes

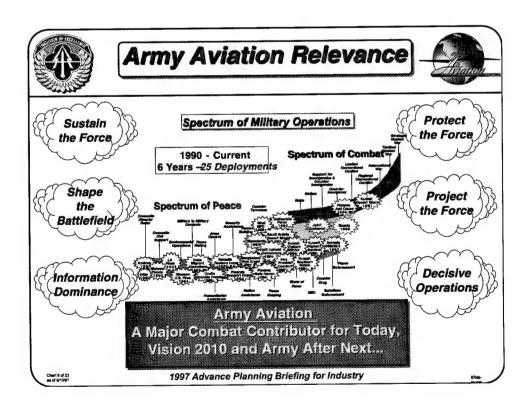
Chart 2 of 23 as of 9/10/97 1997 Advance Planning Briefing for Industry

971da-











Army After Next => Operational Needs

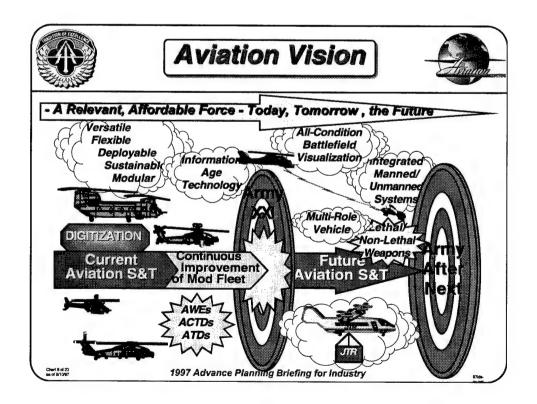


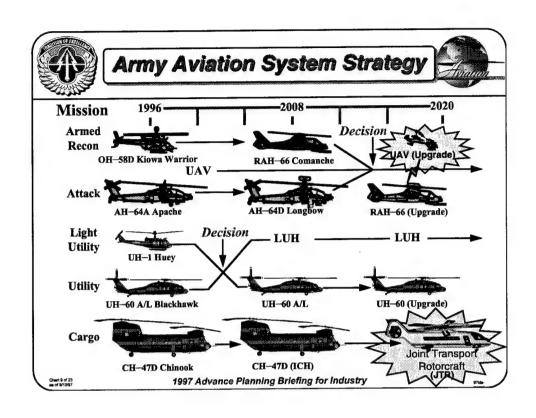


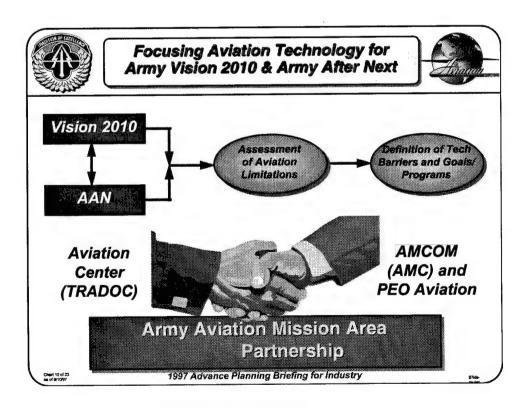
Seize the Initiative, Build Momentum...

- —Power Projection
- High Speed Strategic Lift
- -Situational Awareness
- Tactical and Operational Fires
- Speed: Strategic, Operational, Tactical
- -Reduced Logistics Tail
- Dominant Maneuver and Precision Engagement
- -Tailorable, Versatile
- —Expansible

The Goal: A *globally self-deployable* force capable of striking directly at strategic and operational centers of gravity



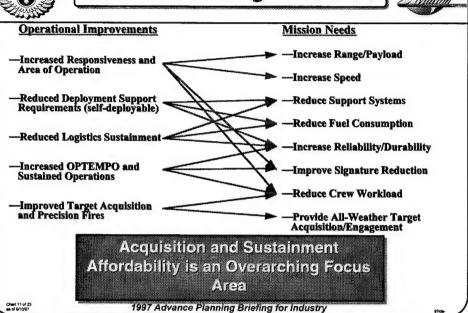






Aviation Challenges for AAN







Technology Goals/Thrusts for AAN Aviation



Technology Goals*

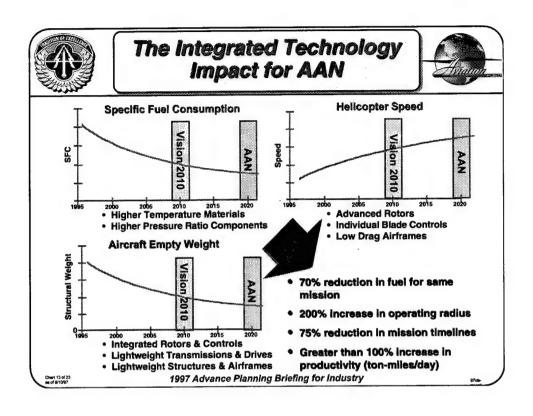
- —150/200% Increased Payload/ Range (respectively)
- -20% Increase in Speed
- —40% Reduction in Support Systems and Personnel
- -60% Reduction in Specific Fuel Consumption
- -70% Increase in Reliability/ Durability
- -80% Reduction in Signature
- —50% Increase in Crew Station Effectiveness (Lower Workload)
- -75% Reduction in Target
 Acquisition and Engagement
 Time Lines
- —40% Reduction in Acquisition and Sustainment Costs
 * Against Current Mod Fleet Baselines

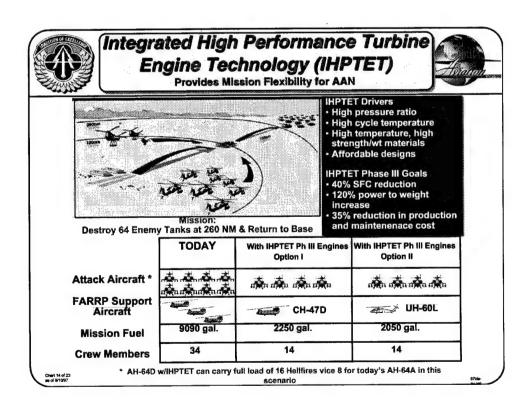
Technology Thrusts

- Advanced Rotors and Individual On-Blade Controls
- —Large Section Lightweight Composite Structures
- Advanced Materials and Designs for High-Temp/ Pressure Turboshaft Engines
- —Integrated Diagnostics/ Prognostics
- ---6-Sigma Design
- -High Efficiency Power Transmission Concepts
- -Integrated Signature Control
- --- Cognitive Aided Crew Stations
- —Integrated Sensor-Fused Targeting and Smart Lethal/ Non-Lethal Weapons
- —Integrated Manned/Unmanned Systems

Chart 12 of 23 as of 9/10/97 1997 Advance Planning Briefing for Industry

17lde-







Aviation Technology Advanced Concepts for the AAN



"Working Outside the Box"

Autonomous Unmanned Air Lift Systems

- Ship-to-shore (LOTS)
- FARRP Resupply
- Deep Mission Resupply

Manned/Unmanned Systems

Scout/Attack Missions

Surgical Urban Warfare

Large Area Coverage

System Upgrades JTR

Multirole/Mission Vehicle

- Rapidly Mission Adaptable
- Variable Diameter Rotor
- Self-Deployable
- High/Low Speed
- All Weather

Alternate Propulsion

- Directed Energy
- Solar Cells
- Electric Power

Exploit New System Concepts

- Focus on Cost Reduction
- Reduce Logistics
- Increase Survivability
- Increase Operational Effectiveness
 1997 Advance Planning Briefing for Industry

Achievable only through integration of multiple agency initiatives

Chert 15 of 23



Critical Technologies for Expanded Unmanned Concepts for the AAN



- Intelligent Flight and Vehicle Management Controls
 - Effective, Highly Reliable, Impervious to Threats
- Flight Path Management to Obstacle Avoidance
- Self-Healing Architectures, Robust, Fault Tolerant
- High Speed Processors for Real-Time Situational Awareness
- Smart Skins/Structures for Signature Control and Durability
- Lightweight, High Strength, Durable, Repairable Materials
- Highly Effective Prognostics
- Alternate Power Sources More Electric, Solar, microwave
- —Design Techniques for "6 Nines(+)" Reliability

With Built-In Affordabiltiy/Sustainability

Chert 16 of 23 as of 9/10/97 1997 Advance Planning Briefing for Industry

97ide-



Technology Operational Payoffs Aviation Promises to AAN



- Overall Aviation Mixed Fleet (Observation, Attack, Utility, Cargo)
 Unit Speed Increase → 175+ kts
- Routinely Operate with Mission Radius Without FARRPs → 500 km
- Full Spectrum Threat Protection
- All Weather and Battlefield Obscurant Operations Capability Anytime, Anywhere
- Sustained 12 Hour Day Operations with Today's TO&E
- —95% Probability for 30 Day Brigade Operations with Only ASL/PLL Support
- Operational Availability 98% with 99% Mission Reliability
- Integrated Manned/Unmanned Concepts to Reduce Cost and Support

Chart 17 of 23 as of 9/10/97 1997 Advance Planning Briefing for Industry





AMCOM FY 97/98 Aviation OSCR Program Summary

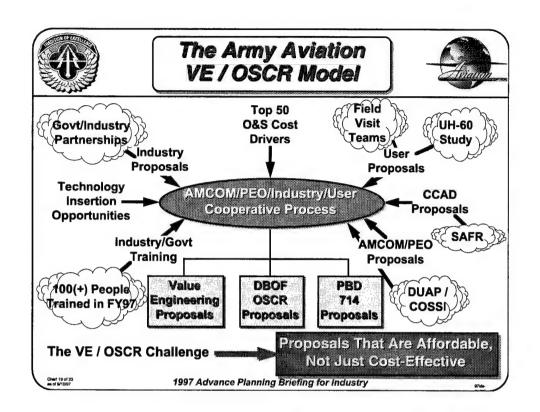


SYSTEM	FY97 APPROVED INITIATIVES		FY98 PROPOSED INITIATIVES		NON-RECUR	
	PBD 714	AMC SMA OSCR	PBD 714	AMC SMA OSCR	\$M	\$M
AH-64	3	1	0	2	\$1.706	\$142.878
UH-60	0	1	0	2	7.416	152.062
OH-58D	1	0	0	1	3.677	171.521
CH-47	0	0	0	3	16.484	177.140
TOTAL	4	2	0	8	29.283	643.601

Chart 18 of 2

1997 Advance Planning Briefing for Industry

B7ide-





FY 97 OSCR Examples



INITIATIVE	PROGRAM	NON-RECUR INVESTMENT (\$M)	PRÖJECTED 10-YR SAVINGS (SM)
AH-64 Main Rotor Blade Spar Debond Repair	AMC: SMA-OSCR	\$0.504	\$113.259
UH-60 T700 Engine Component Retirement for Cause	AMC: SMA-OSCR	2.961	62.647
Kiowa Mast Mounted Sight Central Power Supply	AMC: RM&S (PBD-714)	0.827	63.669
AH-64 PNVZ Azimuth Drive Actuator	AMC: RM&S (PBD-714)	0.122	0.258
AH-64 PNVS Elevation Belt Assembly	AMC: RM&S (PBD-714)	0.312	7.181
AH-64 Day Shroud Harness Modification	AMC: RM&S (PBD-714)	0.117	7.181

Chert 20 of 23 se of 9/10/97

1997 Advance Planning Briefing for Industry

97/de-



Re-Engineering the Aviation S&T and Engineering Processes



- How do we do business with a smaller workforce for S&T and Engineering
 - More budget reductions for personnel
 - QDR recommended more personnel reductions
- —Continue to re-engineer our processes to work smarter
- -Institute Government/Industry IPTs.
 - Harness synergies and expert knowledge base
 - Simplify and use best business practices



Chart 21 of 23 as of 9/10/97 1997 Advance Planning Briefing for Industry

871de-



Notion For Fleet Block Improvements



- -Shrinking Budgets for Modernization
 - Upgrades & Technology Insertion vice New System starts
 - Traditional product improvement process untimely, costly and impacts aircraft availability
- -Need a Fleet-wide Block Improvement process
 - Need to garner industry & DoD support
 - Package technologies/upgrades and identify critical time-frames for insertion
 - Minimize MWO costs and aircraft downtime
- —Use Government/Industry IPTs to coordinate and choose best approaches.
 - Apache Modernization Team as the model
 - Implement Series of Studies for Engineering Processes

Chart 22 of 23 se of 9/10/97 1997 Advance Planning Briefing for Industry

971de-



Summary



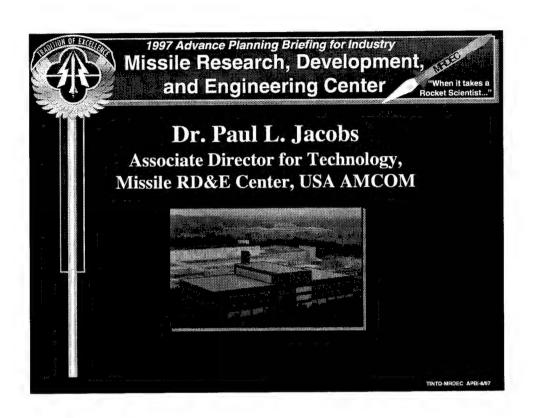
- —Army Aviation is a <u>must</u> for Army Vision 2010 and Army After Next (AAN).
- —AVRDEC's S&T Program will facilitate the evolution of Army Aviation to meet the Army's future needs.
- —OSCR / VE initiatives will create substantial savings for Army Aviation.
- —Team RDEC and Industry Cooperation are essential to our success.

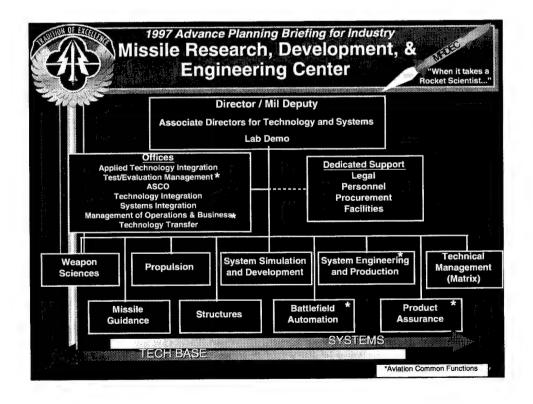
Chert 23 of 23

1997 Advance Planning Briefing for Industry

8714









What's Important

"When it takes a Rocket Scientist..."

Affordability & Cost Effectiveness

Supporting Force Projection Lightweight, Miniature Componen Air Transportable/Droppable Surv

- System Upgrades & Improvements on Current Systems

TINTO-MRDEC APBI-8/97



1997 Advance Planning Briefing for Industry

Technologies & Capabilities for the Future

- Counter-Counter Measures (e.g. Image Tracking, CAPS)
- Autonomous / Man-Aided Target Acquisition
- · Affordable Multi-mode Seekers
 - · Weather / CM
 - Data Fusion
 - Target Discrimination of Low Observables (Included in Clutter)
- Low Cost Guidance Systems
- Small Inertial Sensors
 - Inexpensive
 - · High Dynamic Range
- Missile Guidance Radars

TINTO-MADEC APRI-8/97



Technologies & Capabilities for the Future

"When it takes a Rocket Scientist...

- Packaging (Missile Size and Ruggedization Constraints)
- · MEMS
 - Mini UAV
 - Sensors
 - Propulsion
- Target-Adaptive Software; Upload Prior to Launch
- Increase Range
- · Warheads / Payloads
- Light Weight Composite Technology
- Demilitarization
- Predictive and Diagnostic Technology for Service Life

Extension

Affordable Software

TINTO-MRDEC APBI-8/97



1997 Advance Planning Briefing for Industry

FY98 6.2 Program

"When it takes a

Structures

- Solid Mechanics and Materials
- * Guidance Aided Fuzing
- MLRS Smart Tactical Rocket (MSTAR)
- * Ducted Rocket Engine
 * Compact Kinetic Energy
 Missile (CKEM)
- * Seeker Dome for Air and missile Defense

Missile Guidance

- Fiber Optic Gyros & Low Cost Inertial Components
- Control Systems Technology
- Body Fixed Seeker Technology
 Fiber Optic Winding & Dispensers
- NCTR/MRSR
- SAR & Laser Target Acquisition
- Integrated Teleoperated Missile Technolongy (ITMT)
- * ATR for Weapons
- * Guidance Software Technology
- * LCPK 2.75 Rocket Technology * HIQUAMS

Weapon Sciences

- Photorefractive Materials & Optical Morphology
- Photonic Band Gap Technology
- Pulse Coupled Neural Nets
- Integrated PhotonicsQuantum Optics &
- Chaos Theory
- * Hybrid Optical Processing for Imagery Analysis

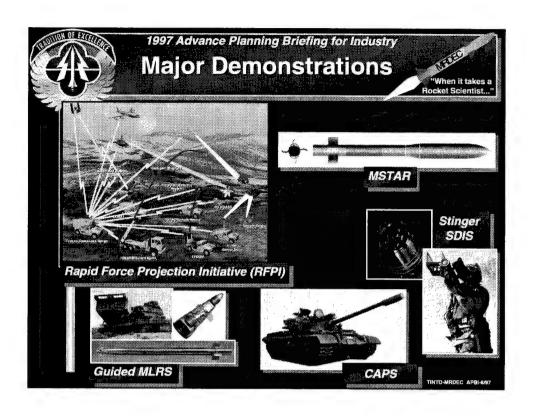
System Simulation

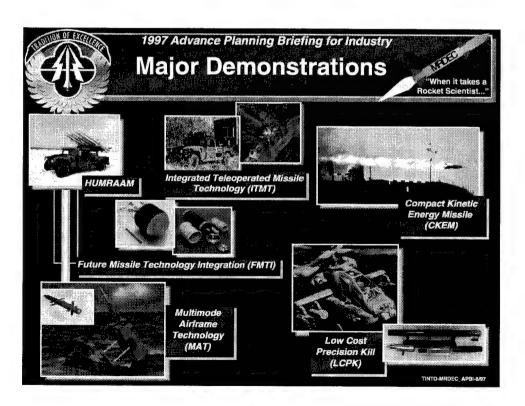
- Separated Flow Aerodynamics
- Grid Fin & Dispenser Technology
- Dual Mode MMW/IR Seeker
- RF Simulation Technology
- EO/IR Simulation Technology
- * Multi-Mode Airframe Technology

*STOs

Propulsion

- Gel Propulsion Technology
- Solid Propulsion Insensitive
- Air Breathing Propulsion
- Service Life Prognostics
- Pintle Controlled Solid Propulsion
- * Flexible Sustainer for Multi-Mission Weapons







SBIR

"When it takes a

Previous SBIR program solicitation

- Phase II contracts to be awarded by 12 Dec 97
- Current SBIR program solicitation
 - Phase I contracts to be awarded by 14 Nov 97
 - Phase II proposals submission (follow on to Phase I): 14 Apr 98
- The next SBIR program solicitation
 - Phase I submission by industry: Jun Aug 98
 - Phase I awards: Dec 98 (for \$100k over 6 months)
 - Phase II proposals submission (follow on to Phase I): Jun Jul 99
 - Phase II awards: Jan Feb 00 (for \$750k over 2 years)

POC: Otho (Buddy) Thomas (205) 842-9227

- DARPA SBIRs administered by AMCOM
 - Phase I submission by Industry: Jan 98 (DoD solicitation)
 - Phase I awards: Mar Apr 99
 - Phase II (follow on to Phase I): following completion of Phase I

POC: Jerry Hagood (205) 876-3700

TINTO MODEC ADBLEST



1997 Advance Planning Briefing for Industry

DARPA Programs Office Weapons Sciences Directorate

"When it takes a

The DPO Can Provide Assistance in Identifying DARPA Interest Areas and Points of Contact for:

- Contracts in Basic and Applied Research.
- Programs of Joint Interest to MICOM/DARPA.
- Concept and Hardware Developments in:
 - Fiber Optic and GPS Guidance Systems
 - IFOG Manufacturing Techniques
 - Advanced Materials
 - Advanced Simulation Networks and Techniques
 - Automatic Target Recognition
 - Surveillance and Targeting
 - Battlefield Information Systems

POC: Jerry Hagood - (205) 876-3700



What is TECHNOLOGY TRANSFER(T2)?

It is a PROCESS Where FEDERAL GOVERNMENT TECHNOLOGIES and Products Developed Are PROVIDED to Potential USERS in a Manner That Encourages and ACCELERATES THEIR COMMERCIAL APPLICATIONS

T² Vehicles

 Cooperative research and development agreement (CRDA)
 Patent licensing agreement (pla)
 Consulting

Facilities use Bailments

Who in AMCOM

Mr. Kelly B. McGuire

CHIEF, TECHNOLOGY TRANSFER OFFICE PHONE: 800-Army Tip FAX: 205-876-8866 EMAIL: ORTA@redstone.Army.Mil

Why do Technology Transfer?

Cooperative agreements

- Multi Faceted program to meet Industry's needs
- Provides Technical Assistance
- 32 agreements with Industry, acacemia, state& Local governments have been executed.

MARKETING FEDERAL TECHNOLOGIES



1997 Advance Planning Briefing for Industry

TACAWS / FMTI TTO

"When it takes a

Goal: To promote horizontal integration of technology by transitioning government owned intellectual property from the FMTI Technology Demonstration Program to contractors in the Army Potential Contractor Program

9 Areas of Research Represented: Aerodynamics, Fire Control, Telemetry, Battlefield Simulation, Control Actuation Systems, Airframes, Imaging Infrared Seeker and Auto Tracking

118 Contractors registered in this program

For information contact Tammy Williams, Acting MRDEC TILO, 205-876-4270 williams-ts@redstone.army.mil. Listing available through http://ippd.redstone.army.mil/tacaws2.html



Missile Guidance Directorate

- Application of Sensors, Computational Capability, and Specific Force Generation that Allows a Weapon to Engage Both Fixed and Moving Targets with Improved Accuracy and Lethality While Minimizing **Collateral Damage and Casualties**
- Major Competency Areas:
 - Missile System Sensors and Seekers
 - Inertial Sensors and Control Systems
- **Guidance Information and Signal Processing**
- Air Defense Systems Technology
- Guidance Systems Analysis Technology System Integration
- Technology Thrusts:
 - Precision Guidance of Small Diameter Weapons
 - Multispectral Missile Seeker
 - Enhanced Target Acquisition, Recognition and Classification

POC: Dr. James Bradas- (205) 876-1717



1997 Advance Planning Briefing for Industry

Missile Guidance Directorate Activity Summary

"When it takes a Rocket Scientist..."

MISSILE SYSTEMS SENSORS AND SEEKERS

- **GUIDANCE SENSORS**
 - Infrared Seeker CM/CCM Technology High Quantity Anti-Materiel Submunition **HELLFIRE III Seeker Technology**
- TARGET ACQUISITION Masked Target Acquisition

INERTIAL SENSORS AND CONTROL SYSTEMS

- Low Cost Inertial Components **Fiber Optics Gyroscope** Inertial Component Technology Microelectromechanical Systems Technology
- **Control Systems Components Control Systems Technology**
- **Fiber Dispenser Development** Small Fiber & Long Range Payout



1997 Advance Planning Briefing for Industry Missile Guidance Directorate Activity Summary

"When it takes a Rocket Scientist..."

GUIDANCE INFORMATION AND SIGNAL PROCESSING

- Automatic Target Recognition (ATR) Development Non-cooperative Target Recognition ATR Algorithms and Processors
- Advanced Imaging Trackers
 Advanced Imaging Trackers
- Software Analysis Development Computer Technology

LOW COST PRECISION KILL MISSILE DEMONSTRATION

INTEGRATED TELEOPERATED MISSILE TECHNOLOGY

SUPPORT SYSTEM DEMONSTRATIONS

- Guided MLRS / MAT / FMTI / RFPI / CKEM

TINTO-MRDEC_APEI-8/97



1997 Advance Planning Briefing for Industry

Propulsion Directorate

"When it takes a

- Conduct research, development, test, and engineering on missile propulsion systems and gas operated power systems
- . Monitor all Army missile propulsion activity worldwide
- Provide technical support to all AMCOM PM/PEO activities and other Government Agencies

Technology

- Develop mission adaptable system
- Reduce signature
- · Higher ISP
- Increase Survivability

Customer Support

- · System design and analysis
- · Service Life analysis and prediction
- Demilitarization
- · Failure analysis



TINTO-MRDEC_APEI-MY



Propulsion Directorate

Activity Summary

When it takes a

Gel Propulsion Systems

- Develop reliable and cost effective methods to manufacture stable fuel and oxidizer gels
- Establish laboratory tests to characterize gel propellant properties
- System demonstration of on-demand pressurization
- **Develop vortex engine**

Pintle Controlled Solid Propulsion

- Evaluate heavywall hardware
- Emphasis on maintaining high motor efficiency
- Model development
- Control algorithm development
- Evaluation of pintle materials
- Evaluation of high exponent propellants

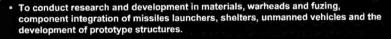
Airbreathing Propulsion

- Develop long sustain capability
- Develop and utilize analytical tools for quantifying alternate propulsion cycles

1997 Advance Planning Briefing for Industry

Structures Directorate

"When it takes a Rocket Scientist...'



- Provide technical capability for structural analysis, failure analysis, material design, thermodynamics, dynamics, solid and fluid mechanics.
- Provide mission related technology to all elements of AMCOM, project managers and other government agencies.
- Fiber Reinforced Composite Design
- Mechanical & **Physical Property**
- Characterization
- Corrosion / Deterioration
- Prevention & Control
- · Launcher / Vehicle
- System Integration
- Fire Control
- Electronics **Aircraft Weapons** Systems
- Airworthiness Flight Release
- Systems Integration
- Armor / Anti-Armor Systems
- Warheads and Fuze R&D
- · Solid and Fluid Mechanics
- Dynamics Thermodynamics and Heat Transfer CAD / CAE
- Systems Engineering and Integration



Structures Directorate Activity Summary

"When it takes a

- · MEMS
- Improved Warhead Lethality
 Shape Charge & Kinetic Energy
- Robotics
 - Robust, Secure, 20km, Point-to-Point Data Link
- . Low Cost, High Strength Carbon-Carbon Composite
- Nozzles & Fins
- Metal Matrix Composites at Current Fiber Composite Prices
- "Good" Accelerated Aging Test Procedure
- Environmentally Friendly Protective Coatings

TINTO-MRDEC APBI-8/97



1997 Advance Planning Briefing for Industry
Structures Directorate

Contract Opportunity

"When it takes a

Warhead Systems Design & Effectiveness Analysis Support

CONTRACT OPPORTUNITY

\$10M

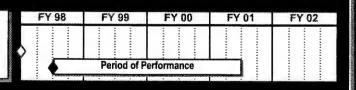
ESTIMATED VALUE

Harold Smith

CONTRACTING POINT OF CONTACT CPFF OR CPAF - SMALL BUSINESS - COMPETITIVE

TYPE AND KIND OF AWARD

DESCRIPTION: Provide support to the Structures Directorate Systems & Warheads Function in the areas of warhead, penetrator, missile, rocket and system design and effectiveness analysis that provides integrated lethality solutions to customer problems.



1997 Advance Planning Briefing for Industry Systems Simulation and Development Directorate

Current Programs Supported

"When it takes a Rocket Scientist..."

SYSTEM LEVEL PERFORMANCE SIMULATIONS

- JAVELIN Integrated Flight Simulation
- · CCAWS ITAS Virtual Engineering Prototype
- · Rotary Wing Virtual Prototype

INTEGRATED SYSTEMS EFFECTIVENESS

- · ATACMS-BAT P3I Lethality
- Threat Active Protection System Models & Simulation

BMC3I WEAPON SYSTEM PERFORMANCE

· RFPI Hunter/Killer Integration

SYSTEM INTEGRATION ANALYSIS AND HWIL INTEGRATION

- · PAC-3 HWIL
- · HELLFIRE LONGBOW HWIL & STAF
- · FOTT

AERODYNAMICS AND FLUID DYNAMICS

- CFD for Missile Plume Flow Field and Infrared Radiation Estimation
- Hypervelocity Missile Tests and Models

DISTRIBUTED INTERACTIVE SIMULATION

- RFPI Warfighting Experiments
- · Extended Air Defense Test Bed

TINTO-MRDEC APBI-8/97



1997 Advance Planning Briefing for Industry Systems Simulation and Development Directorate

Tools and Capabilities

"When it takes a Rocket Scientist...'

SYSTEM LEVEL PERFORMANCE SIMULATIONS

- Large Scale High Fidelity Hardware-in-the-Loop
- · Six Degrees of Freedom Analytical
- · Virtual, Constructive

INTEGRATED SYSTEMS EFFECTIVENESS

- · End Game / Lethality / Survivability
- Wargame and Force-on-Force Simulations

BMC3I WEAPON SYSTEM PERFORMANCE

SYSTEM INTEGRATION ANALYSIS AND HWIL INTEGRATION

AERODYNAMICS AND FLUID DYNAMICS

- · Wind Tunnel, Sled, and Ballistic Range Testing
- Airframe Design Model Development CFD Analysis

DISTRIBUTED INTERACTIVE SIMULATION

- · AMCOM DSI Node
- Real Time Distributed Experiments and Exercises
- · Virtual Prototype Development and Applications



1997 Advance Planning Briefing for Industry **Systems Simulation & Development Directorate**

Contracting Opportunity

When it takes a

IMAGING INFRARED HARDWARE-

IN-THE-LOOP

SIMULATION SUPPORT

CONTRACT OPPORTUNITY

\$7M - \$10M

ESTIMATED VALUE

Ms. BECKY SHOCKLEY

CONTRACTING POINT OF CONTACT

COMPETITIVE, FULL AND OPEN

TYPE AND KIND OF AWARD

DESCRIPTION: HARDWARE-IN-THE-LOOP SIMULATION DEVELOPMENT, IMPLEMENTATION, AND OPERATION IN THE ADVANCED SIMULATION CENTER IMAGING INFRARED (IIR) SIMULATION SYSTEM 1 AND HYBRID SIMULATION LABORATORY.



FY 98	FY 99	FY 00	FY 01	FY 02
>				



1997 Advance Planning Briefing for Industry Weapons Sciences **Directorate**

"When it takes a Rocket Scientist...

- Perform Basic Research and Applied Technology for Missile and **Directed Energy Applications**
- Agent for Defense Advanced Research Projects Agency

Technology

- Electro-Optical Polymer Technology
- Diffractive Optics
- Integrated Photonic Devices
- Holographic Data Storage
- Pattern Recognition
- Photonic Bandgap Materials
- Nonlinear Optics
- **Pulse Coupled Neural Networks**
- Chaos Control/Engineering
- Matched Filter Technology
- Optical Correlators
- Directed Energy



Weapons Sciences Directorate

Activity Summary

"When it takes a Rocket Scientist..."

Integrated Photonics/Diffractive Optics

- Develop and demonstrate components with electro-optical polymers for missile guidance and communication
 - Gyro sensor technology
 - Interconnect component development
- Insert weight-saving diffractive optics technology into existing optical and IR systems Develop kinoform diffractive technology and hybrid components

 - Develop diffractive structures for spherical and other curved surfaces

Pattern Recognition

- Optical correlator assisted target recognition for SAR imagery
- Hyperspectral data analysis for target recognition
- Holographic crystal storage of images
- Neural network applications

Quantum Optics

- · Photonic band gap materials
- Quantum computing
- · Semiconductor laser dynamics
- Neural networks for chaos control and other applications

Directed Energy

- Dye lasers for military and medical applications
 High energy lasers for strategic and tactical missile defense



1997 Advance Planning Briefing for Industry

Software Engineering Directorate

"When it takes a Rocket Scientist..."

AMCOM LIFE CYCLE SOFTWARE ENGINEERING CENTER (LCSE)

PROVIDE MISSION CRITICAL COMPUTER RESOURCE (MCCR) EXPERTISE TO SUPPORT WEAPON SYSTEMS OVER THEIR LIFE CYCLE. COMMAND FOCAL POINT FOR MCCR.

- COMPUTER HARDWARE/SOFTWARE TECHNOLOGY
- ACQUISITION AND DEVELOPMENT (AD)
- SOFTWARE VERIFICATION AND VALIDATION (V&V)
- POST DEPLOYMENT SOFTWARE SUPPORT (PDSS)
- INTEROPERABILITY ENGINEERING AND TEST (IET)



Software Engineering Directorate

"When it takes a Rocket Scientist...'

TECHNOLOGY AREAS OF INTEREST IN SOFTWARE ENGINEERING

- SOFTWARE ENGINEERING ARCHITECTURE
- RE-ENGINEERING OF REAL-TIME SYSTEMS
- SAFETY CRITICAL SOFTWARE DEVELOPMENT

TINTO-MRDEC APBI-8/97

1997 Advance Planning Briefing for Industry

SED Contract Opportunity

"When it takes a Rocket Scientist..."

TITLE: SYSTEMS & SOFTWARE ENGINEERING SUPPORT

TYPE: COST PLUS FIXED FEE

SOLICITATION DATE: 1 MAY 98

AWARD DATE: 1 JAN 99

APPROXIMATE VALUE: \$200M - \$250M

KIND OF AWARD: COMPETITIVE

MAJOR AREAS OF EFFORT:
POST PRODUCTION SOFTWARE SUPPORT
SYSTEMS ENGINEERING & ANALYSIS SUPPORT
SOFTWARE FIELDING
SIMULATION/TEST BED DEVELOPMENT & SUPPORT
NON-SYSTEM SPECIFIC SOFTWARE SUPPORT OF SED
FOREIGN MILITARY SALES
SPECIAL SYSTEMS & SOFTWARE ENGINEERING ANALYSIS
FOR AVIATION AND MISSILE SOFTWARE INTENSIVE SYSTEMS



System Engineering & Production Directorate

"When it takes a

Supports

Aviation & Missile RDECs

PEO Air & Missile Defense

Deputy for Systems Acq.

PEO Tactical Missiles

PEO Aviation

MISSION and FUNCTIONS

- Management and Execution of the following AMCOM Programs:
 - Data Management
 - Production Engineering
 - Test Program Sets (TPSs)
 - Configuration Management
 - Industrial Preparedness Planning
 - Production Base Support Operations
 - Manufacturing Technology (ManTech)
 - AMCOM/DoD International Standardization
- Engineering Services Support for out-of-production systems, and spare parts procurement and TPS development/sustainment support for AMCOM managed missile systems and designated non-AMCOM managed systems
- Prototype Fabrication Facilities for electrical / mechanical and microelectronic fabrication, assembly, and verification
- Direct activities of three regional Technical Support Offices

TINTO-MADEC APPLANT



1997 Advance Planning Briefing for Industry
System Engineering & Production Directorate

ManTech R&D Activity Summary

"When it takes a Rocket Scientist..."

DoD / DARPA

- Affordable Multi-Missile Manufacturing (AM3) ATD
- Interferometric Fiber Optic Gyro (IFOG) Flexible Manufacturing ATD

MISSILES

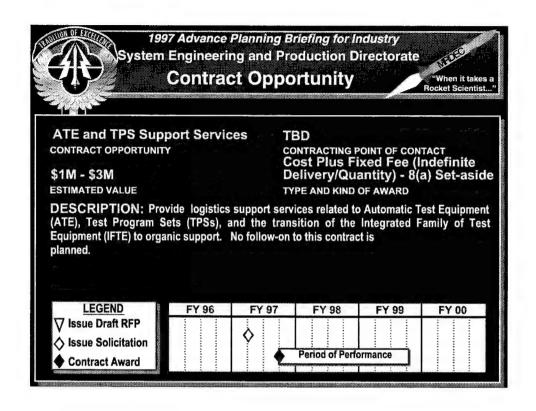
- Flexible Manufacturing Environment for MMW Transceivers
- ManTech for Missile Seeker Components
- Mantech for Traveling Wave Tubes
- Ultra High Modulus PAN Fibers

AIR VEHICLES

- Improved Airframe Manufacturing
- CCAD Aircraft Sustainment Program
- Integrated Composite Manufacturing
- Instrumented Factory for Gears (INFAC)
- Cast Beryllium Aluminum (BeAl) Components
- Integrated Manufacturing System for Fiber Optics
- Non-Contact Measurement of Propulsion System Components

SBIRs - Four (4) Manufacturing Related Research and Development Projects

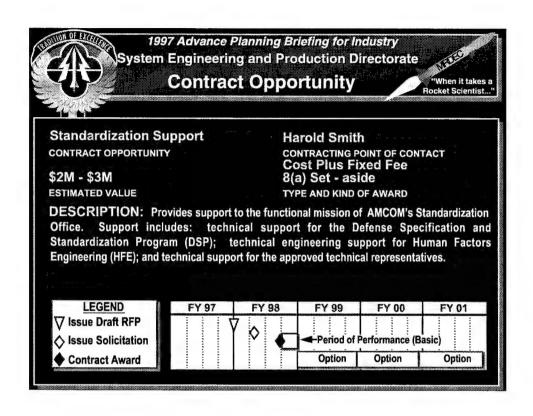
TINTO-MADEC APEI-8/97















1997 Advance Planning Briefing for Industry System Engineering and Production Directorate

Contract Opportunity

When it takes a

Devel. of Plastic Encapsulated Microcircuits (PEMs) Coating Processes for Military Applications

CONTRACT OPPORTUNITY

\$5M - \$6M

ESTIMATED VALUE

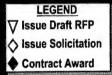
Harold Smith

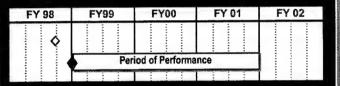
CONTRACTING POINT OF CONTACT Cost Shared - No Fee

Competitive

TYPE AND KIND OF AWARD

DESCRIPTION: Manufacturing Technology Program effort to develop and prove out new and enhanced coating processes and equipment that will improve the reliability of plastic encapsulated microcircuits for use in military systems subjected to harsh environments and long term storage







1997 Advance Planning Briefing for Industry Product Assurance Directorate

"When it takes a Rocket Scientist..."

- Assure that Quality, Reliability, and Maintainability are Emphasized in Every Phase of the Product Life Cycle
- Assure that MICOM Products Conform to Correctly Defined Technical Requirements
- Perform Research in Technology and Methodology for Improving the Quality of Weapon Systems

Technology

- Requirements Generation R&M and Quality Prediction, Modeling, Simulation
- Software Quality Assurance
- Statistical Process Control Variability Reduction
- · Parts Physics of Failure, Long Term Reliability, Screening/Testing

Engineering/Testing

- Stockpile Reliability/Shelf Life
- Special Inspection Equipment Design Requirements, Suitability & Validation
- Cost Effective Manufacturing
- Fly-to-Buy Missile Firing Tests
- R&M Test Data Scoring/Assessments
- First Article/Quality Verification Testing





Product Assurance Directorate

Activity Summary

When it takes a Rocket Scientist..."

SMARTS - Self-Monitoring Advanced Remote Technology System

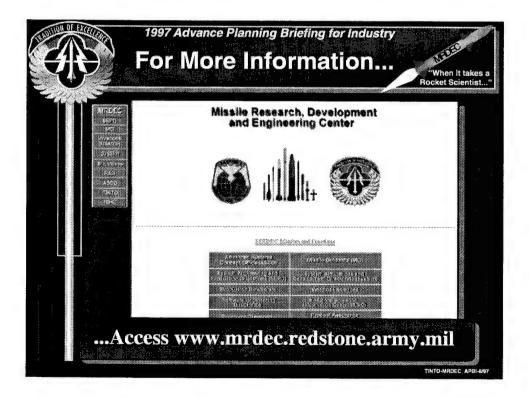
- A Technology Reinvestment Program (TRP) Focusing on Microelectromechanical Applications
 Includes Military Missiles and Commercial Bridge Project
- Consortium Includes Auburn University, Analog Devices, Northrop Grumman, System Excelerator, Thomas Equipment, Weld Star Technologies, U.S. Army Aviation and Missile Command, and Florida Department of Transportation
- Enables the Development of More Accurate Reliability Modeling and Asset Tracking
- Real Time System Operates in Both Interrogate and Alarm Mode
- Reduces Cost by Reducing Field Surveillance and Facilitating Conditioned Based Maintenance

PEMS - Plastic Encapsulated Microcircuits

- Cooperative Research and Development Agreement (CRDA) with Northrop Grumman, Honeywell, and Lucent
- Joint DoD/Doe Munitions Technology Development Program Sandia and PAD
 Analyzes Reliability Characteristics of PEMs when Placed in Dormant Storage
- Identification of Failure Mechanisms
- · Development of Predictive Models for PEMs
- **Develop Acquisition Guidelines for PEMs**

RRAPDS - Remote Readiness Assessment Prognostics/Diagnostics System

- RRAPDS is envisioned as the next generation remote monitoring and failure prognostics/ diagnostics system
- An Advanced Technology Demonstration (ATD) is currently being proposed







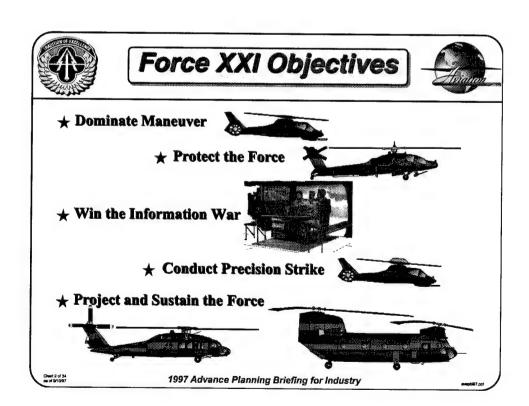


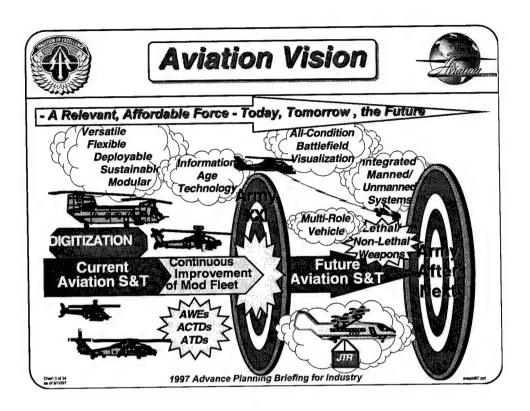
Advance Planning Briefing for Industry
Huntsville, AL
21-22 Oct 97
Mr. Robert V. Kennedy
Associate Director for Technology

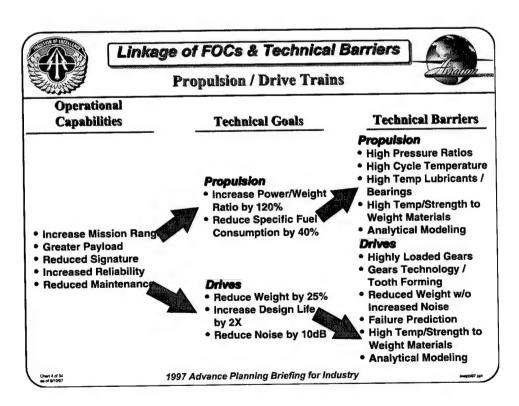
Chert 1 of 34

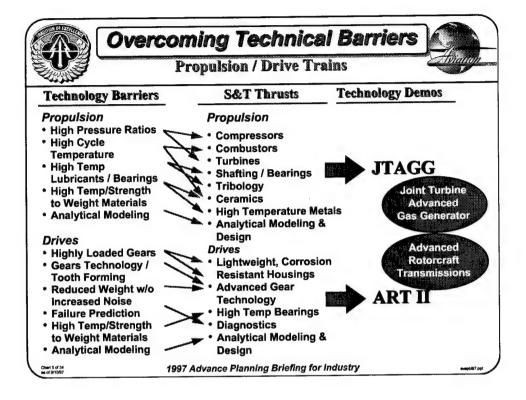
1997 Advance Planning Briefing for Industry

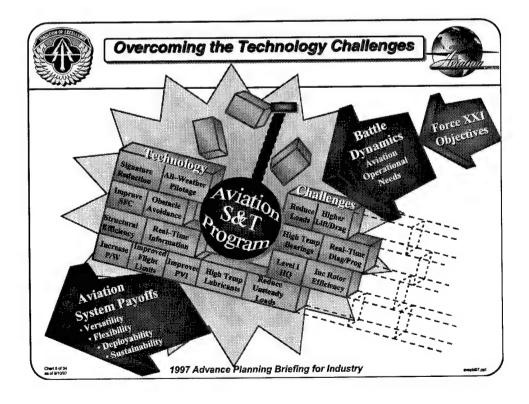
avapbili97.ppt

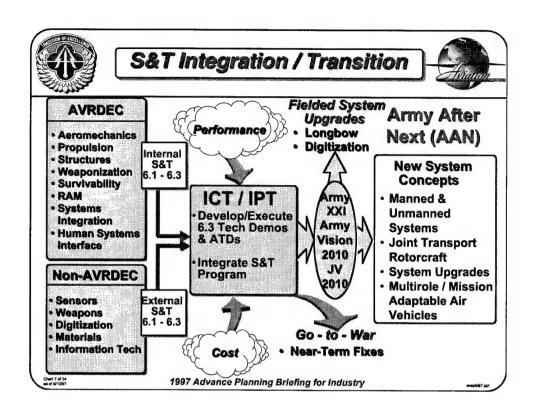


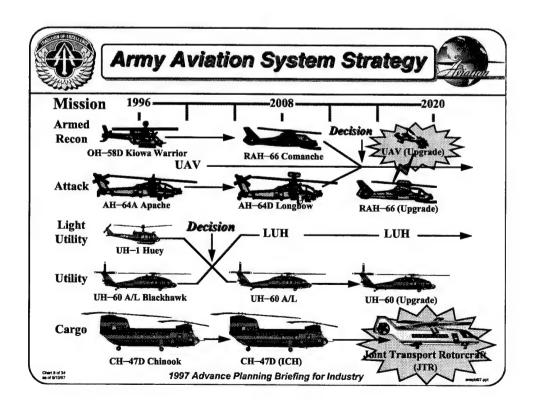




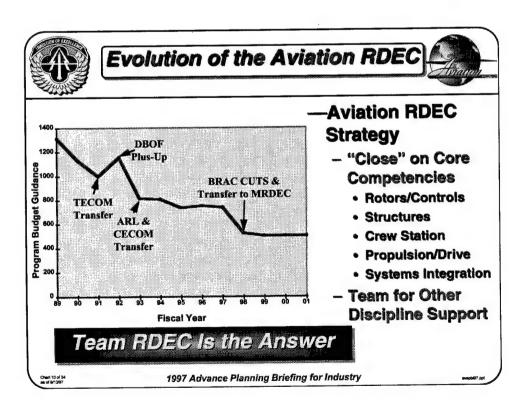


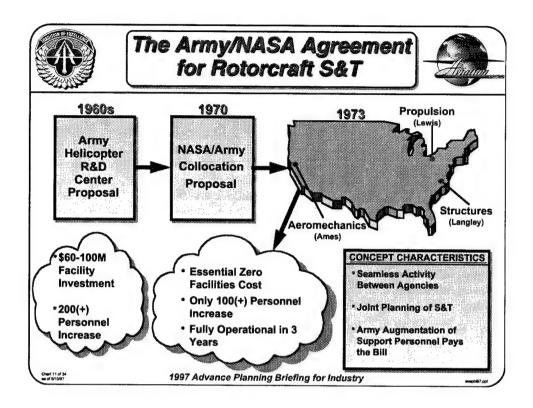














Success of ARMY/NASA Agreement



AH-64D Rotor/ Body Interferance

AH-64D Crew

Station Comanche Rotor

- Leverages \$5-10M per year of both agencies rotorcraft S&T budget
- Prioritizes availability of critical national assets for Army R&D support
 - Every Army helicopter development since 1972 has required dedicated, extensive wind tunnel and simulator support
 - NASA's engineers continuously support Army IPTs
- \$100M(+) NASA rotorcraft facilities expansion/adaptation over past 25 years due to Army presence
- Nation's small turboshaft engine program totally depends on Army's presence at NASA Lewis

BOTTOM LINE: Army/NASA Agreement is the Prototype for Achieving True Joint Agency Cooperative Programs

Chart 12 of 3 as of 9/10/97 1997 Advance Planning Briefing for Industry

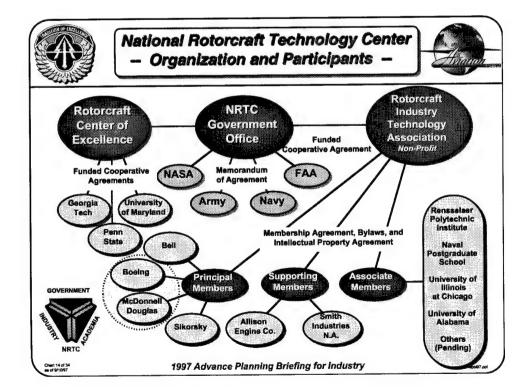
avepbil97.ppt

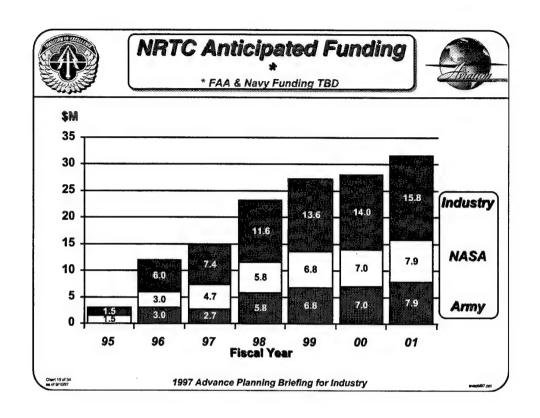


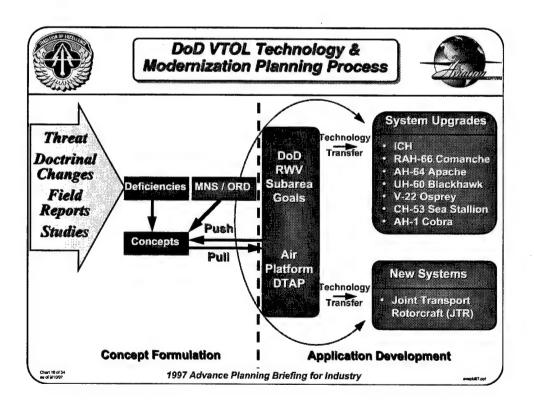
Army (DOD)/Civil Helicopter Operator Interests

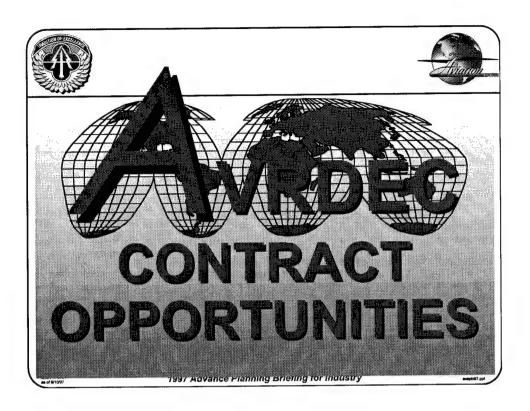


Area	Army	Civil	Comment
Payload & Range	0		Most civil operations are
Speed	0	0	short–haul.
Support Systems	0	0	Big problem for both users
Fuel Consumption & Price	0	0	Can make or break civil operations.
Reliability / Durability / Dependability (Dispatch Reliability)	0	0	Public has concerns over helicopter safety.
Noise – Internal & External	0	0	Restricts civil operations in many cities.
Day, Night, All-Weather Operations	0	0	Essential to expanded utilization by both.
Crew Station – Workload		0	Pilot workload reduction
Aircrew Safety	0	0	Crew / Public Safety
Affordability		0	Obvious













Advanced Combusters

CONTRACTING OPPORTUNITY

\$1.2-1.3M

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cooperative Agreement 50/50 Share

CONTRACT TYPE

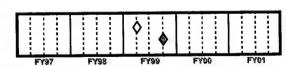
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Conduct design, fabrication, and rig test of advanced high temperature combuster for a turboshaft engine (3000 SHP class). Major emphasis will be placed on durability (life), pattern factor, cost, weight, and operability. Issues for operability include improved ignition capability, stability (lean blow out), and fuel nozzle plugging.

- A ISSUE DRAFT RFP
- SISSUE SOLICITATION
- CONTRACT AWARD



Chert 16 of 34

1997 Advance Planning Briefing for Industry

avapbili7.ppt





Airborne Manned/Unmanned System Technology (AMUST) Program

CONTRACTING OPPORTUNITY
\$12-\$14 M

ESTIMATED VALUE

(757) 878-4828

CONTRACTS POINT OF CONTACT
Cost Reimbursable

CONTRACT TYPE Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

The AMUST program will identify, develop, integrate and test technologies necessary for airborne manned and unmanned vehicles to operate as a team in support of the maneuver commander. This effort will explore the application of UAV's as members of the combat aviation team. Technology areas to be explored include: cognitive decision aiding for the unmanned team member, advanced pilot vehicle interfaces, linking of commands and guidance, robust data and control, passive collision avoidance, information sharing, data processing and linkage into the Intelligence network.

- ▲ ISSUE DRAFT RFP
- SISSUE SOLICITATION
 - CONTRACT AWARD

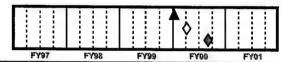


Chart 19 of 34

1997 Advance Planning Briefing for Industry

manh97 nvi



CONTRACTING OPPORTUNITY (U



Helicopter Active Controls Technology (HACT) Program

CONTRACTING OPPORTUNITY

\$22-25M

ESTIMATED VALUE

Lauren Sebring

(757) 878-4828

CONTRACTS POINT OF CONTACT

Cost Reimbursable

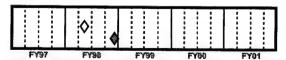
CONTRACT TYPE

PROGRAM DESCRIPTION:

Competitive

Apply inclusive flight control design methodologies and demonstrate cost effective design processes for flight critical systems. Design, develop and flight demonstrate carefree maneuvering for rotorcraft "heads-up - eyes out of the cockpit" vehicle operations and fault tolerant flight critical control systems. The HACT goals include 30% increase in maneuverability and agility, 60% improvement in vehicle pointing and flight path accuracy, and 50% improvement in handling qualities during NOE operations in degraded visual environments.

- A ISSUE DRAFT REP
- SSUE SOLICITATION
- CONTRACT AWARD



Chert 20 of 34

1997 Advance Planning Briefing for Industry

avenda@7.co





Digital Gear Strut

CONTRACTING OPPORTUNITY

\$650-750K

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cost Reimbursable

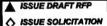
CONTRACT TYPE

Competitive

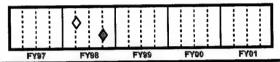
KIND OF AWARD

PROGRAM DESCRIPTION:

Develop and demonstrate a high efficiency, digitally controlled landing gear strut which will increase landing gear energy absorption capability in Army helicopters by 40%. This will be achieved through improved load-deflection properties by direct control of the crash hydraulic orifice strut-mounted accelerometers and possibly a microprocessor. Full-scale drop tests will be performed to demonstrate the concept.



CONTRACT AWARD



1997 Advance Planning Briefing for Industry



CONTRACTING OPPORTUNITY (U)



Multi-spectral Coatings

CONTRACTING OPPORTUNITY

\$800-900K

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cost Reimbursable

CONTRACT TYPE

Competitive

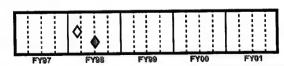
KIND OF AWARD

PROGRAM DESCRIPTION:

Develop and demonstrate advanced coatings and/or appliqués that provide improved control of thermal emissions in the mid-IR and far-IR bands, coloration and glint control for low visual contrast against terrain backgrounds, and high transmission in the RF bands for compatibility with RAM/RAS materials. The coating system will be CARC capable. Material performance will be demonstrated on laboratory coupons.



CONTRACT AWARD



1997 Advance Planning Briefing for Industry





Digital Advanced Adaptive Controls & Diagnostics (DAACAD) Program

CONTRACTING OPPORTUNITY

\$1.6-1.8M

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cooperative Agreement 50/50 Cost Share

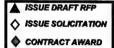
CONTRACT TYPE

Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Develop full authority digital controls (FADEC) with full "adaptive" capability for turboshaft engines and integrating this 3rd generation technology with the next step in engine diagnostics which are compatible with the current Army Advanced Turbine Engine Diagnostics System (TEDS). The over-arching concept is to synthesize/integrate several advancements in the areas of engine controls and advanced diagnostics.



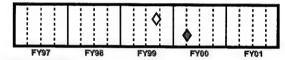


Chart 23 of 34

1997 Advance Planning Briefing for Industry

svepbi07.ppt



CONTRACTING OPPORTUNITY (U)



Rotorcraft Air Combat Enhancement (RACE) Demonstration

CONTRACTING OPPORTUNITY
\$10-13M

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cost Reimbursable

CONTRACT TYPE

Competitive

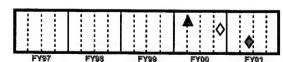
PROGRAM DESCRIPTION:

KIND OF AWARD

The RACE Technology Demonstration will develop, integrate, and flight demonstrate the technologies necessary for the Army's existing and future helicopter fleet to meet the Mission Need Statement (MNS). This MNS is for an Air-to-Air (ATA) capability for Army aviation to defeat the threat and protect itself and friendly forces. Technology candidates include improvements to gun, rocket, missile, target acquisition and fire control systems and other systems integration technology necessary to achieve an ATA combat solution.



CONTRACT AWARD



Chert 24 of 34 se of 9/10/97 1997 Advance Planning Briefing for Industry

svepbi97.ppt





Rotary Wing Structures Technology (RWST) Demonstration

CONTRACTING OPPORTUNITY

\$15-20M

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT
Cooperative Agreement
with Cost Sharing

CONTRACT TYPE

Limited Competition

KIND OF AWARD

PROGRAM DESCRIPTION:

Conduct preliminary design, detail design, and manufacturing demonstration tasks to re-engineer a 1994 military helicopter structural technology baseline. Use IPPD tools, knowledge base systems, automated analysis methods, and solid modeling supporting a virtual prototype. Use manufacturing simulation to establish process capabilities. Demonstrate technology that compared to the baseline will reduce Unit 1 recurring manufacturing labor by at least 25% and reduce structural weight by 15% through increased structural efficiency.



- SSUE SOLICITATION
 - CONTRACT AWARD

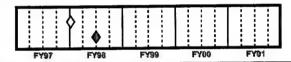


Chart 25 of 34 se of 9/10/97 1997 Advance Planning Briefing for Industry

avepbil(7.ppt



CONTRACTING OPPORTUNITY (U)



Composite Main Rotor Controls

CONTRACTING OPPORTUNITY

\$450-550K

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cost Reimbursable

CONTRACT TYPE

Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Design a fatigue limited main rotor control component for composite construction with improved life with respect to the baseline design. Conduct fatigue testing of a full scale component to demonstrate increased life and adequate static strength.

▲ ISSUE DRAFT RFP

♦ ISSUE SOLICITATION

• CONTRACT AWARD

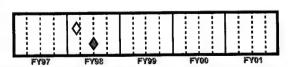


Chart 26 of 34

1997 Advance Planning Briefing for Industry

амарый7.рр





Ballistic Tolerant Stiffeners

CONTRACTING OPPORTUNITY

\$500-600K

ESTIMATED VALUE

Lauren A. Sebring (757) 878-4828

CONTRACTS POINT OF CONTACT

Cost Reimbursable

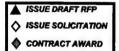
CONTRACT TYPE

Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Design and fabricate helicopter primary structure both with and without transverse laminate pin reinforcement. Conduct stiffness, static, and ballistic testing on both specimens and compare results.



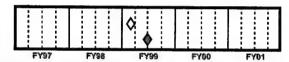


Chart 27 of 34

1997 Advance Planning Briefing for Industry

swepbil()7.ppt



What is a Cooperative Research and Development Agreement (CRDA)?



- A Formal Agreement Between a Government Lab and a Partner in Industry or Academia to Conduct Joint Research.
- Government Provides Technical Personnel, Services, Facilities, Equipment, and Other Resources, <u>But No</u> Funds.
- The Partner Provides Technical Personnel, Services, Facilities, Equipment, and Other Resources and <u>Can be requested to Provide Funds</u>.
- The Agreement Defines he Sharing of Intellectual Property.
- The Purpose is to Provide Mutual Benefit to Government and Private Sector to Enhance U.S. Global Competitiveness.

Chart 28 of 34 as of 9/10/97 1997 Advance Planning Briefing for Industry

ewepbil97.ppt



Advantages To A CRDA



- Participants are able to Leverage Resources: Manpower, Facilities, and Funding
- Technical problems can be solved more effectively by a Team Effort.
- Technology base is increased by both organizations.
- Provides Special considerations for small businesses.
- Intellectual property protected.

Chart 29 of 34

1997 Advance Planning Briefing for Industry

weebi87.ppt



Small Business Innovative Research (SBIR) Program Objectives



- Stimulate Technological Innovation
- Increase Small Business Participation in Federal R&D
- Increase Private Sector Commercialization of Technology Developed through Federal R&D; Document Return on Investment
- Foster and Encourage Participation by Woman-owned and Socially and Economically Disadvantaged Small Businesses

Chart 30 of 34

1997 Advance Planning Briefing for Industry

swepb#07.ppt



FY96 SBIR



•	FY96	DA	Extramural R&D) Program	\$ 4 Billion
---	-------------	----	---------------------------	-----------	--------------

•	SBIR Tax	(2%)	\$79	.94	Million
---	-----------------	------	------	-----	---------

• AVRDEC SBIR Program \$ 9.0 Million

Number of DA Phase I 266

AVRDEC PHASE I 23

Number of DA Phase II
 99

AVRDEC PHASE II 13

Chart 31 of 34

1997 Advance Planning Briefing for Industry

machili7.not



Milestones for DA SBIR Program



Solicitation Opens May

Solicitation Closes July

Phase I Evaluations Completed October

Phase I Contract Awards
 November

Phase II Letters of Invitation
 May

Phase II Proposals Due June

Phase II Evaluations Completed July

Phase II Contract Awards
 December

Chart 32 of 34

1997 Advance Planning Briefing for Industry

eveptall97.ppt



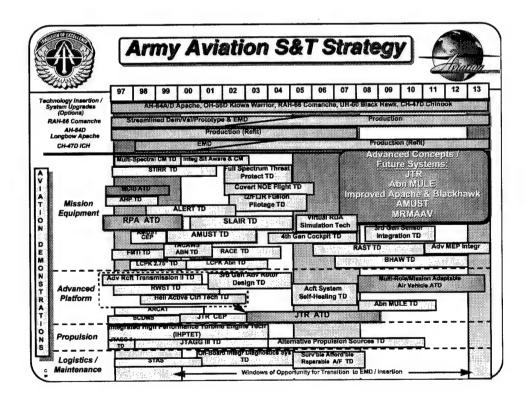
SBIR Provides Opportunities For Large Companies Too!



- Large Companies can be a Subcontractor on Phase II Programs.
- "Mentoring" Relationship of Large Company to Small Company under "Fast Track" Matching Funds.
- Small Companies Retain the Patent Right to any Invention.
- Opportunities exist for Large Companies, as well as Small Companies, through Teaming.

Chart 33 of 34 as of 9/10/97 1997 Advance Planning Briefing for Industry

avepbi07.pp







Aviation & Missile Contracting Opportunities



Presented by:

John R. Chapman

Integrated Materiel Management Center (IMMC)
U.S. Army Aviation and Missile Command



Telephone: (205) 876-3108



MMC enter

i of 18

5216GS.00

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Aviation & Missile Contracting Opportunities



I am John Chapman, Deputy Director of the Integrated Materiel Management Center (IMMC) here at AMCOM. We are very appreciative of the opportunity to once again participate in the APBI and tell you about the Center and our role in the support and sustainment of AMCOM managed aviation and missile systems.

2 of 18

6218GS.002



IMMC Mission



- Centralized Integrated Materiel Management
- National Maintenance Management
- National Inventory Control Management
- Ammunition Management
- AMCOM ILS and Manprint Policies & Procedures
- AMCOM Aviation and Missile Readiness Program



3 of 18

6218QS.002

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



IMMC Mission



The mission of the IMMC is to provide centralized integrated materiel management for assigned systems and equipment. We accomplish this through National Maintenance Management and National Inventory Control Management for aviation and missile systems. We establish worldwide maintenance policies and procedures and insure that spares and repair parts are available to support a high level of readiness throughout the life cycle of the various aviation and missile systems that we manage. In addition, we serve as the focal point for explosive and ammunition expertise associated with all Army missilery. We also provide manpower and Integrated Logistics Support policies and procedures for assigned equipment and ensure that the Army's aviation and missile readiness is maintained to accomplish rapid, concise victory in the event of a war.

4 of 18

6218GB.00



Integrated Materiel Management Center



Office of the Director James L. Flinn III, Director John R. Chapman, Deputy Dir

Aviation Systems
Directorate
Thomas J. Lavin, Director

Air Defense Directorate Land Combat
Directorate

Paul R. Carlton, Director Tommie Cutts Jr., Director

Business Management Directorate

Daniel H. Kruvand, Director

Logistics Support Directorate

Richard E Turner, Director

Readiness Directorate

William T. Ingram, Director

Tarine onlar

5 of 1

5216GS.002

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Integrated Materiel Management Center



This chart depicts the IMMC structure under the new command which became effective in July of this year. The AVIATION SYSTEMS DIRECTORATE has the mission and functions for the support and sustainment of all AMCOM managed aviation systems. The AIR DEFENSE DIRECTORATE has the mission and functions for the support and sustainment of all air defense systems. The LAND COMBAT DIRECTORATE has the mission and functions for the support and sustainment of tactical missiles and land combat systems. These three directorates provide centralized integrated materiel inventory management for assigned systems and equipment. They establish logistics support priorities and determine logistics support requirements. These will be the main offices that initiate requirements for spare/repair parts procurements. We will be talking to you more about contracting opportunities for spare/repair parts later in the briefing.

The BUSINESS MANAGEMENT DIRECTORATE and the LOGISTICS SUPPORT DIRECTORATE serve as enablers to the three hardware directorates by providing policy, budgeting, administrative, and subject matter expert support.

The READINESS DIRECTORATE provides support in the areas of world-wide logistics assistance; analysis and sustainment and other customer support; material fielding and new equipment training.

Back-up charts, depicting the structure of the Directorates within IMMC under the new command, are provided for your information.

8 of 16

5218GS.002



Spares / Repair Parts **Procurement**



- 57,000 ITEMS MANAGED
- 3,600 BUYS PER YEAR
- 1,820 COMPETITIVE BUYS
- · PROJECTED OPPORTUNITIES ARE:

\$132.1M

FY97: \$154.6 Competitive

PROXIMATELY 40% OF **OUR PROCUREMENT** IS COMPETITIVE

SPARES CATEGORIES FOR **COMPETITIVE AWARD**

CABLE ASSEMBLIES CASE ASSEMBLIES **HEAT EXCHANGERS** MODULE HAND CARRIER SUPPORT ASSEMBLIES **ELEVATORS**

ALTITUDE ASSEMBLIES ACCESS COVERS **PUSH ROD ASSYS** SHROUDS

BALL BEARINGS CONNECTING LINKS **LANDING STRUTS &**

WHEELS

POWER SUPPLIES CONTROL PANELS COWLINGS HOSE ASSEMBLIES

NOSE CONES TAIL CONES VALVES

WIRING HARNESSES FAIRINGS NOZZLES

INDICATORS BOLTS **GEARSHAFTS**

SPECIAL REUSABLE CONTAINERS **AVIATION GROUND SUPPORT EQUIPMENT** WINDOW PANELS & WINDSCREENS

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Spares / Repair Parts **Procurement**



We in the IMMC are currently supporting over 90 aviation and missile weapon systems and associated equipment. For these systems, we actively manage about 57,000 individual lines of aviation and missile peculiar hardware and ammunition. We initiate, on the average, about 3,600 buys each year for spares and repair parts, of which 1,820 are competitive buys.

The projected competitive dollar buys for aviation and missile spares for FY 98 and FY 99 are \$132.1 million and \$106.1 million respectively.

In FY 97, we obligated approximately \$154.6 million in competitive buys.

Based on the history of the buys for the last few years, we project that approximately 40% of our total procurement each year will be competitive.

Due to the large volume of items that we manage, we could not list all the items which may be procured; however, this chart provides a broad overview of the types/ categories of items where requirements are currently projected.



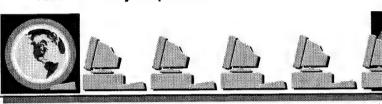
Missile SPARES Projections Through APAI



Advanced Planning Acquisition Information (APAI)



- **→ SPARES Requirement Projections for Three Years**
- ◆ Accessible Through Acquisition Bulletin Board System (BBS) - Contact Small Business Office
- ◆ Accessible Through Internet @ http://michp 753. redstone. army.mil/procbbs/





9 of 18

216GS.002

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Missile Spares Projections Through Apal



The Advanced Planning Acquisition Information (APAI) is the primary mechanism for communicating spare/repair parts requirements to industry and is available to all U.S. industries upon request or through automated systems.

The APAI provides spares requirement projections for three years and can be accessed through the Acquisition Bulletin Board System (BBS). It should be noted that the aviation projections are not included in this database at the present time; however, they will be incorporated in the future. Information not on the bulletin board can be obtained from the AMCOM Small Business Office.

The APAI and Bulletin Board System can also be accessed through the Internet at the following address: http://michp753.redstone.army.mil/procbbs/.

10 of 11

6216GS.002



Engineering and Technical Services (ETS) Support



Purnose To provide logistical support services for the Integrated Materiel Management Center in support of AMCOM weapon systems and associated equipment.

Type of Contract Multi-Award Contract with Basic plus 9 options.

Areas ni Coverage

Aviation and Missile Weapon Systems and Support Equipment

Anticipated Skill Regulrements

- Project Leader
- Logistics Analyst
- Engineer
- Maint Mgmt Spt
- Mat Mgmt Spt
- Packaging/Traffic Mgmt Spt
- · Provisioning/Item Introduction Spt
- Technical Writer/Editor
- Technical Illustrator Gen Supply Spt
- Inv Supply Tech
- Equip Maint Aide
- Clerk/Typist

\$65M - 85M

Over Five Years

Projected Deliar Estimates

RFP Release First Week In February 98
Award Date September 98

Key Dates (estimates)

11 of 18

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Engineering and Technical Services (ETS) Support

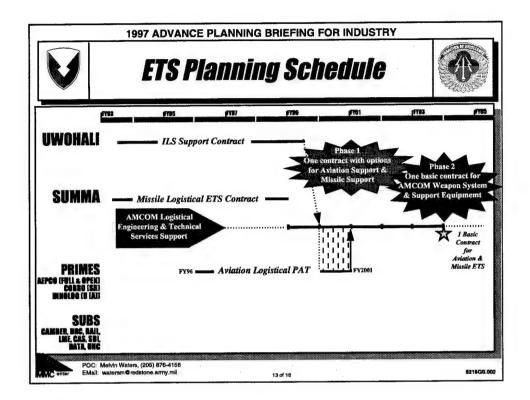


Another private sector initiative within IMMC is the outsourcing of selected logistical functions. This initiative procures logistical services from the private sector which assists IMMC in providing sustainment support for the AMCOM weapon systems and support equipment. While we are still working under the former ATCOM and/or MICOM support contract vehicle, action has been initiated to develop a single AMCOM logistical Engineering and Technical Service contract.

The contract itself will be a five-year contract for logistical support of aviation and missile weapon systems and their support equipment. We are looking at a multiaward contract much like the Programmatic and Technical Support (PATs) contracts of the former ATCOM. This means support will be provided by a team of contractors.

We estimate there will be around thirteen skill requirements (depicted on chart) with a dollar value between \$65 to \$85 million dollars over the five year period.

Right now we are shooting for the first week in February 98 for the release of the request for proposal (RFP) to the private sector with an award date around September





ETS Planning Schedule



To help both our present support contractors and our future support contractors understand how we are going to get to an AMCOM contract, let us take a look at IMMC's planning schedule.

Currently, we have three primary logistics service contracts that we will honor; the ILS support contract with UWOHALI, the Missile Logistical ETS contract with SUMMA, and the aviation logistical PAT contract that has three primes and eight subcontractors. We will continue to use these contracting vehicles until they expire. Since they do not all expire at the same time we are looking at a two-phase approach to establish a single AMCOM logistics Engineering and Technical Service contract.

Within the first phase we plan to implement a five year contract with options for both ILS, missile, and aviation support. The options will only be executed when the existing contract with similar services expires. This will allow us to honor our current contracts while providing continuous coverage for all logistical functions without implementing individual one to two-year contracts. In fiscal year 2004 we will implement Phase 2 which will establish a single contract with standard options over five years to support AMCOM weapon systems and support equipment.

Through this plan we will honor our current contracts, continue our efforts to outsource selected logistics functions, maintain continuous contractor logistical support coverage, minimize contracting overhead actions, and work towards the goal of a single logistics ETS contract for AMCOM.

14 of 18

5216G8.002



Modernization Through SPARES



Modernization Through SPARES:

- Eliminates buying spare parts on outdated specifications and technical data packages.
- Bases the procurement on new designs and manufacturing technologies.
- Modernizes, but incrementally enhances the performance and reliability of end items.



Benefits of using MTS:

- Reduces long-term sustainability or operating and support (O&S) costs which constitutes at least 60 percent of a system's life cycle costs.
- · Upgrades system capability.
- · Introduces new technology which significantly improves reliability.
- Integrates the military and commercial industrial bases.



POC: John Smith, (205) 876-1802 EMail: jvsmith@redstone.army.mil

15 of 18

5218GS.002

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Modernization Through SPARES



Modernization Through Spares (MTS) is a spares improvement program where, through the implementation of the 90's acquisition reform policies, present day technologies are inserted into future spares procurement. Through MTS, the entire system is improved.

In Jan 96, because of constraints in current and future funding to modernize major weapon systems, the Program Executive Offices and the Major Subordinate Commands were tasked by the Assistant Secretary of the Army and the Commanding General, AMC, to devise and pursue a modernization through spares initiative.

What does it do? It eliminates buying spare parts on outdated specifications and technical data packages. It bases the procurement on new designs and manufacturing technologies. It modernizes, but incrementally enhances the performance and reliability of end items.

Some of the benefits of using MTS are that it reduces long-term sustainability or operating and support (O & S) costs which constitutes at least 60 percent of a system's life cycle cost. It upgrades system capability, and introduces new technology which significantly improves reliability. It also integrates the military and commercial industrial bases.

The MTS is a shared effort among AMCOM elements. The IMMC has the responsibility for the programmatic and logistics function; the SEPD, RDEC provides the technical expertise; and the Acquisition Center manages the acquisition for the program. The AMCOM LogLab, which is located in the IMMC, is developing a methodology for MTS which can be used across the full range of AMCOM spares procurement. A draft implementation plan has been submitted and coordinated for review and comments. When MTS is implemented, it has the potential for significantly reducing the cost of modernizing major weapon systems.

18 of 1

6216GS.002



Integrated Materiel Management Center



 Provide World Class Logistics Support to our Customers



 Ensure Weapons Systems Readiness, and Sustainment Support for Tomorrow's Quality Army



 Continuously Improve Logistics Processes

V.MC enter

17 of 18

5218G8.002

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY



Integrated Materiel Management Center



The IMMC is committed to:

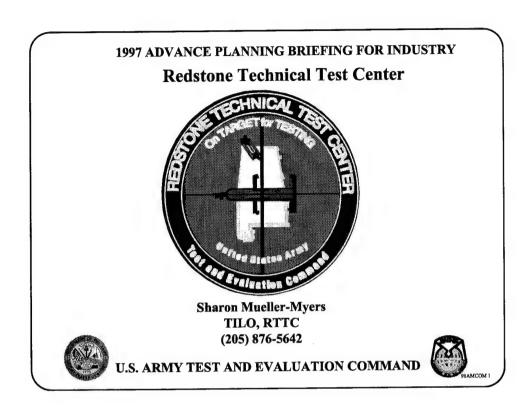
- Providing world class logistics support to our customers.
- Ensuring weapon systems readiness and sustainment support for tomorrow's quality army.
- Continuously improving logistics processes.

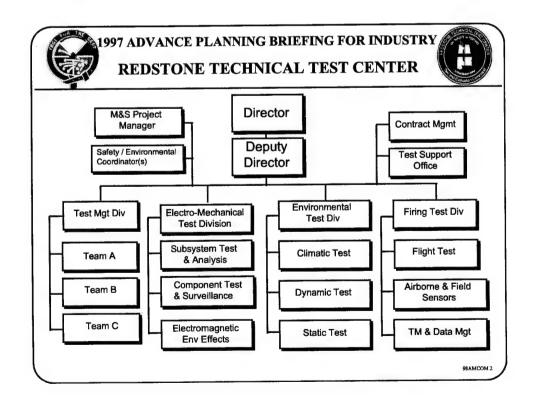
In conclusion, we thank you for your attention and hope that we have given you a better understanding of the IMMC's role in the support and sustainment of AMCOM-managed systems. We trust that our broad overview of the types of items that will be procured in the next two years will assist you in your near term planning for spare/repair parts contracting opportunities.

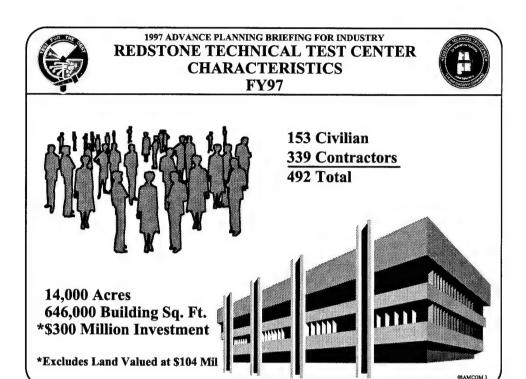
18 of 18

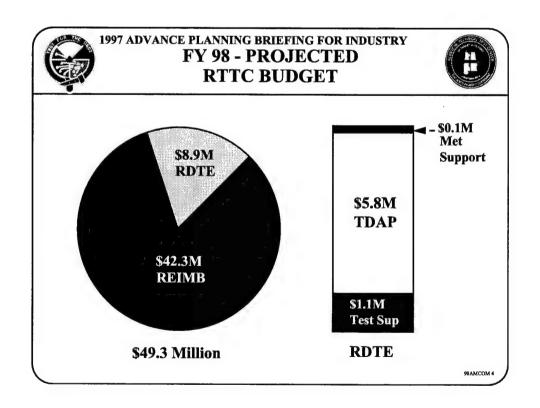
5216GS.00







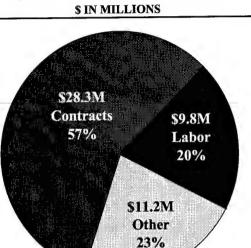






1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY FY 98 PROJECTED BUDGET BY OPERATING ACCOUNT





\$49.3Million

BAMCOM :



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY CONTRACT OPPORTUNITIES



- General Support Contracts (CPFF)
 - -Seven each renewed on repetitive basis
 - Small Business (Two 8A Set Aside)
- Test Instrumentation (FFP)
 - -11 Actions (\$100K \$3 M)
- Contracting Officer
 - Ray Shores (205) 876-3432
 - AMCOM Acquisition Center



GENERAL SUPPORT CONTRACTS



DESCRIPTION	EXPIRES	Est. Value in \$ Mil	
Support - Electro-Mech Test	Nov 1997	39.8	
Support - Static Test (*)	Jul 1999	31.9	
Support - Mech Component & Vibration Test	Oct 1999	32.0	
Support - Test Planning, Eval & Documentation (*)	Jan 2000	28.3	
Support - Airborne & Field Sensors	Jan 2001	22.4	
Support - Climatic	Feb 2002	16.2	
Support - Ordnance	Jul 2002	30.2	
			98AMCOM 7



(*) - 8A Set

1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY ACOUSTIC FLIGHT VIBRATION SIMULATION FACILITY



 OBJECTIVE: CONVERT EXISTING STRUCTURE INTO A VIBRO-ACOUSTIC FLIGHT SIMULATION FACILITY. BASIC - SYSTEM DESIGN, FACILITY MODIFICATIONS, PROCURE ACOUSTIC MODELING WORKSTATION. OPT I - INSTRUMENTATION AND INSTALLATION. OPT II - INSTRUMENTATION, SYSTEM INTEGRATION, TRAINING. CONTRACT TYPE: FFP

• EST. COST: LESS THAN \$850K

• EST. RFP RELEASE: FY 98

EST. AWARD DATE: FY 98

98AMCOM S



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY ELECTROMAGNETIC RADIATION SUSTAINMENT



- OBJECTIVE: PROCURE AND INSTALL POWER SUPPLIES, TRAVELING WAVE TUBE AMPLIFIERS, ANTENNAS, DRIVERS, ETC. TO UPGRADE RTTC'S EMR ENVIRONMENT GENERATION SYSTEM. CONTRACT TYPE: FFP
- EST. COST: LESS THAN \$300K, MULTIPLE OPTIONS TO TOTAL LESS THAN \$2.5M
- EST. RFP RELEASE: 1ST QTR FY 98
- EST. AWARD DATE: 2ND QTR FY 98,

OPTIONS

SPREAD OVER 4 - 6 YRS

98AMCOM 9



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY HIGH DENSITY DATA RECORDERS



- OBJECTIVE: PROCURE FOUR HIGH DENSITY DATA RECORDERS CAPABLE OF ACCEPTING TWO 20Mb DATA CHANNELS ALONG WITH VOICE ANNOTATION AND IRIG A AND B TIME CODE. THE RECORDERS MUST HAVE INDIVIDUAL LEVEL ADJUSTMENT FOR EACH CHANNEL AND A RECORD TIME OF AT LEAST 90 MINUTES. CONTRACT TYPE: FFP
- EST. COST: LESS THAN \$200K, OPTION LESS THAN \$200K
- EST. RFP RELEASE: 1ST QTR FY 99
- EST. AWARD DATE: 2ND QTR FY 99, OPT FY 00



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY HIGH BANDWIDTH TELEMETRY RECEIVERS AND COMBINERS



- OBJECTIVE: PROCURE FOUR EACH MICROPROCESSOR-CONTROLLED WIDEBAND TELEMETRY RECEIVERS AND TWO WIDEWAND TM COMBINERS WITH FRONT PANEL PLUG-IN RF TUNERS, WIDEBAND DEMODULATORS, AND SECOND IF FILTERS. THE RF TUNERS MUST PROVIDE COVERAGE IN THE S-BAND (2200 2300 MHz). THE WIDEBAND IF FILTER BANDWIDTH WILL BE FRONT PANEL SELECTABLE FOR BOTH 10 AND 20 MHz. CONTRACT TYPE: FFP
- EST. COST: LESS THAN \$175K, OPTION -

LESS THAN

\$175K

- EST. RFP RELEASE: 1ST QTR FY 99
- EST. AWARD DATE: 2ND QTR FY 99, OPT FY 00

98AMCOM



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY FIBER OPTIC INTERFACE EQUIPMENT



- OBJECTIVE: PROCURE AND INSTALL ELECTRONIC END ITEMS FOR RTTC FIBER OPTIC NETWORK CONTRACT TYPE: FFP
- EST. COST: LESS THAN \$400K, OPTION LESS THAN \$400K
- EST. RFP RELEASE: 1ST QTR FY 98, OPT FY 99
- EST. AWARD DATE: 2ND QTR FY 99, OPT FY 99



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY MULTIPLE DEGREE OF FREEDOM SIMULATOR



- OBJECTIVE: PROCURE TWO WIDE BAND (300 Hz)
 GENERAL PURPOSE MDOF MOTION SIMULTORS AND
 CORRESPONDING CONTROL SYSTEMS. CONTRACT TYPE:
 FFP
- EST. COST: LESS THAN \$400K, OPTION LESS THAN \$400k
- EST. RFP RELEASE: 1ST QTR FY 99
- EST. AWARD DATE: 2ND QTR FY 99, OPTION FY 00

98AMCOM



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY MILLIMETER WAVE INSTRUMENTATION RADAR



- OBJECTIVE: IN-BAND TERRAIN MAPPING FOR DEVELOPMENT OF VIRTUAL RANGE TERRAIN MODEL CONTRACT TYPE: FFP
- EST. COST: LESS THAN \$3MIL
- EST. RFP RELEASE: FY 00
- EST AWARD DATE: FY 00





 OBJECTIVE: PROCURE A 15 TON, ROUGH TERRAIN CRANE WITH 80 FOOT BOOM AND HYDRAULIC CONTROLS CONTRACT TYPE: FFP

• EST. COST: LESS THAN \$200K

EST. RFP RELEASE: 1ST QTR FY 00
EST. AWARD DATE: 2ND QTR FY 00

98AMCOM 15



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY SHOCK TESTING (HORIZONTAL)



 OBJECTIVE: PROCURE A SHOCK MACHINE CAPABLE OF PERFORMING SHOCK TESTS ON PAYLOADS RANGING IN SIZE UP TO 2000 LBS IN THE HORIZONTAL DIRECTION. CONTRACT TYPE: FFP

EST. COST: LESS THAN \$550K

EST. RFP RELEASE: FY 00

EST. AWARD DATE: FY 00



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY FLIGHT RANGE MATERIAL HANDLING EQUIPMENT



 OBJECTIVE: REPLACE EXISTING ALL TERRAIN 10,000 LB CAPACITY FORKLIFT.

CONTRACT TYPE: FFP

• EST. COST: LESS THAN \$150K

• EST. RFP RELEASE: FY 00

EST. AWARD DATE: FY 00

98AMCOM



1997 ADVANCE PLANNING BRIEFING FOR INDUSTRY DIGITAL VIDEO DATA COLLECTION



 OBJECTIVE: PROCURE HIGH SPEED, HIGH RESOLUTION VIDEO CAMERAS TO REPLACE HIGH SPEED FILM CAMERAS. VIDEO CAPABILITY WILL PROVIDE NEAR REAL TIME POST FLIGHT DATA REDUCTION AND MISSION PERFORMANCE EVALUATION. CONTRACT TYPE: FFP

• EST. COST: LESS THAN \$350K

• EST. RFP RELEASE: FY 00

• EST. AWARD DATE: FY 00



U.S. ARMY REDSTONE TECHNICAL TEST CENTER



RTTC Technical Industrial Liaison Officer:

Sharon Mueller-Myers

(205) 876-5642

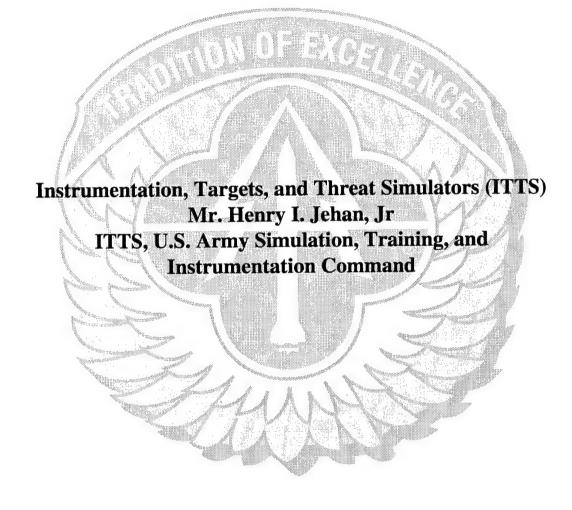
Mailing Address:

Director

Redstone Technical Test Center

ATTN: STERT-TE-S (S. Mueller-Myers)

Redstone Arsenal, AL 35898-8052





PM ITTS





Advance Planning Briefing for Industry (APBI) 1997



UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

MISSION



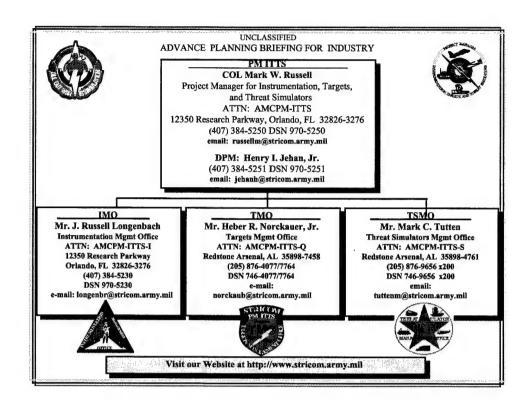
· Manage the Research, Development, Design, Acquisition, Fielding, Modification and Capability Accounting of Targets, Threat Simulators and Major Instrumentation Required for Technical and Operational Test and Evaluation for the U.S. U.S. ARMY T&F Army.



• Operate and Maintain Targets for Test and Training.



Threat Simulators Targets





CONTRACTS



- PM ITTS contracts through several procurement agencies
 - STRICOM/NAWC Instrumentation
 - AMCOM Targets and Threat Simulators
 - TECOM Test Centers Range facilities and Instrumentation



MAJOR TECHNOLOGY THRUSTS



- Embedded Instrumentation
 - Hardened Subminiature Telemetry and Sensors
 - Conformal Instrumentation Packaging
- Emerging Technology Instrumentation
 - Future Armor Concepts
 - Liquid Propellants
 - Electric Drive Vehicles
 - Advanced Sensors



UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

MAJOR TECHNOLOGY THRUSTS



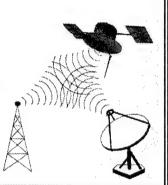
- Test Environment
- Virtual Targets and Threat Simulators
- Interface between Live, Virtual, and Constructive Environments
- · RF Injection for Open Air Testing



Instrumentation Management Office



- Develops Major Instrumentation
- Instrumentation Characteristics
 - Direct and Remote Sensing
 - Detect, Measure, Record, Telemeter, Process and Analyze
 - Used for Technical or Operational Testing





UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

CONTRACTING OPPORTUNITY (U



High Speed Massive Memory/Electronic Film Capability (HSMM/EFC)

CONTRACTING OPPORTUNITY

\$5.0M - \$10.0M

ESTIMATED VALUE

TRD

CONTRACTS POINT OF CONTACT

Negotiated Best Value

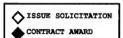
CONTRACT TYPE

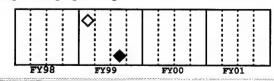
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Develop and deliver stand-alone high density, high frame rate IR and VIS focal plane staring arrays based on Smart Munition Test Suite (SMTS) test prototypes. Includes massive memory devices (20 GB Dynamic RAM with 800 MB/sec data rates). Includes an automated data reduction station for processing digital image data files for multi-service use.







CONTRACTING OPPORTUNITY (U)



Virtual Test and Training Range (VTTR)

CONTRACTING OPPORTUNITY

<\$20.0M

ESTIMATED VALUE

TBD

CONTRACTS POINT OF CONTACT

TRE

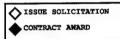
CONTRACT TYPE

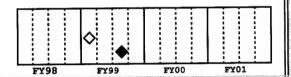
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Develop a concept and provide a demonstration of the techniques for creating a virtual test range environment. The project will explore the extension of the concept to interface with and support training.







UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

CONTRACTING OPPORTUNITY (U)



Advanced Multiple Object Acquisition System (AMOAS)

CONTRACTING OPPORTUNITY

\$5.0 - 20.0M

ESTIMATED VALUE

TBD

CONTRACTS POINT OF CONTACT

Negotiated Best Value

CONTRACT TYPE

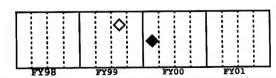
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Develop and deliver a very wide field of view, high resolution, multiple-object tracking instrumentation system with global shared-memory data base manager for the command and control of AMOAS for multi-service use. Includes very high speed control and data transfer links.







Targets Management Office



- Develops, Fields, Operates, and Supports Ground and Airborne Target Vehicles
- Target Characteristics:
 - Supports Testing and Training
 - Economical and Expendable
 - Remotely Controlled or Stationary
 - Often Destroyed in Use

• DOD Lead for Ground and Rotary Winged Targets





Military Operations on Urbanized Terrain (MOUT) Interactive Targetry System

CONTRACTING OPPORTUNITY

< \$5.0M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

FF

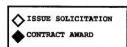
CONTRACT TYPE

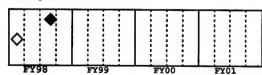
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

One of five subsystems of the Joint Readiness Training Center (JRTC) MOUT Instrumentation System (IS). Targetry (3-D) is required to interactively link with the JRTC IS to collect and display computer assisted exercise simulation and live-fire data. Targetry must also function in stand-alone mode, independent of the JRTC-IS.









Towed Target Engineering Services

CONTRACTING OPPORTUNITY

<\$5.0M (<\$1.0M/YR)

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

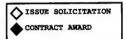
CONTRACT TYPE

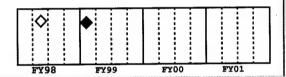
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Engineering services required in support of the TMO Towed Target and Infrared Devices Programs.







UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

CONTRACTING OPPORTUNITY (U)



PATRIOT Omni-Directional (Radar Cross Section) Training Aerial TOW Target (POTA-TOW)
CONTRACTING OPPORTUNITY

< \$1.25M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

FFP

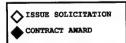
CONTRACT TYPE

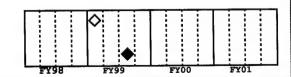
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Production of an inexpensive tow target that possesses radar cross section adequate to support PATRIOT live-fire engagements.







CONTRACTING OPPORTUNITY (U



New Generation Army Targetry System (NGATS)

CONTRACTING OPPORTUNITY

< 4.0M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

FFP

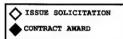
CONTRACT TYPE

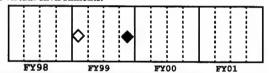
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Develop a new generation of targetry to support current/future combined arms weapons systems (extended ranges, smart weapons, scenarios) and Army battle initiatives. Targetry must be mobile/transportable/deployable worldwide, be compatible with the STOW environment, replicate battle audio/visual stimuli (signatures), support live/dry fire scenarios and operate in real, constructive and virtual environments.







UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

CONTRACTING OPPORTUNITY (U



MQM-107 Production and Engineering Services

CONTRACTING OPPORTUNITY

<\$30.0M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

FFP (Airframes)/CPFF (Engineering Services)

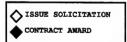
CONTRACT TYPE

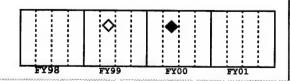
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Manufacture and integration of MQM-107 airframes plus engineering services. Separate contracts for engines, target group sets and recovery systems.







CONTRACTING OPPORTUNITY (U)



Aerial Target Flight Services

CONTRACTING OPPORTUNITY

\$15.0M - \$20.0M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

FFP

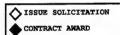
CONTRACT TYPE

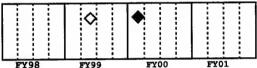
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Operation and maintenance contract for MQM-107/MQM-34 subscale fixed wing targets, QH-50 subscale helicopter targets, QUH-1 and AH-1/HOKUM-X full scale rotary wing targets, and the LANCE target missile system. Targets are flown at numerous CONUS/OCONUS ranges to support ADA training, RDT&E for the Tri-Services and Foreign Military Sales requirements.







UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

CONTRACTING OPPORTUNITY (U)



Target Tracking Control System (TTCS)

Engineering Services

CONTRACTING OPPORTUNITY

<\$1.75M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

CPFF

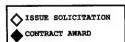
CONTRACT TYPE

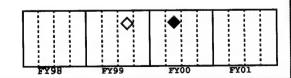
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Engineering services in support of the Target Tracking Control System used for command and control of the Army's subscale and full-scale target fleets.







CONTRACTING OPPORTUNITY (U)



HOKTIM-X

CONTRACTING OPPORTUNITY

<\$10.0M

ESTIMATED VALUE

Kathryn Engle (205) 842-0381

CONTRACTS POINT OF CONTACT

FFP

CONTRACT TYPE

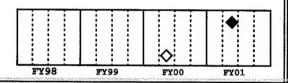
Competitive

KIND OF AWARD

PROGRAM DESCRIPTION:

Production of a full scale aerial target which emulates the Russian Ka-50 helicopter, and can be configured to provide multiple RF and IR signatures. It will support major weapon system test and evaluation.







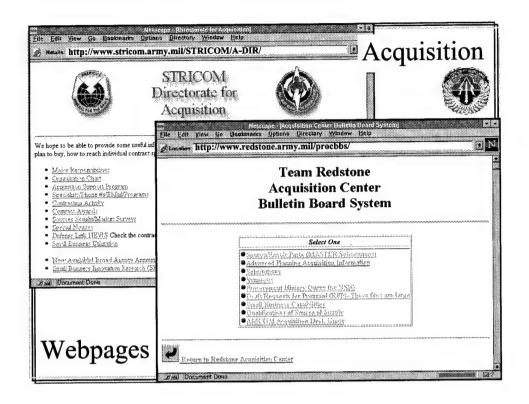
UNCLASSIFIED
ADVANCE PLANNING BRIEFING FOR INDUSTRY

THREAT SIMULATORS MANAGEMENT OFFICE



- Develops and Fields Representative Threat Systems
- Threat Simulator Characteristics:
 - Provides Appearance of Actual Threat
 - Prescribed Degree of Fidelity
 - Used for Testing and Training
 - Small Numbers / Not Destroyed in Use





Visit Us On The Web: Acquisition Webpages



http://www.stricom.army.mil/STRICOM/A-DIR/



• http://redstone.army.mil/procbbs/



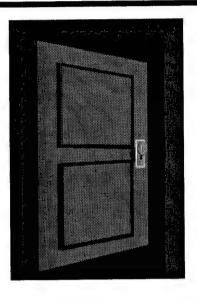
AMCOM ADVANCE PLANNING BRIEFING FOR INDUSTRY

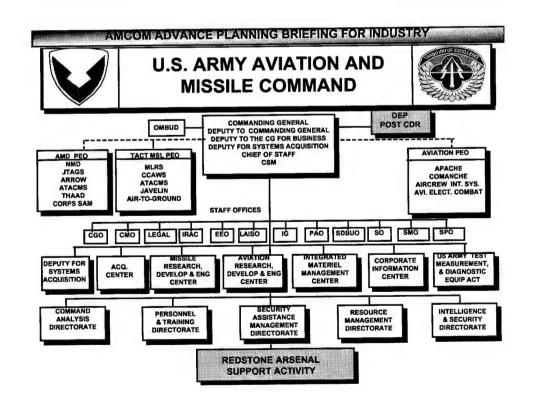


REDSTONE ARSENAL SUPPORT ACTIVITY

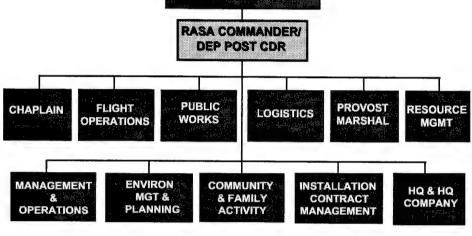


DUANE E. BRANDT COLONEL, OD COMMANDER, RASA





REDSTONE ARSENAL SUPPORT ACTIVITY COMMANDING GENERAL RASA COMMANDER/ DEP POST CDR





AMCOM ADVANCE PLANNING BRIEFING FOR INDUSTRY



SERVICES PROVIDED **BY RASA**



IN-HOUSE SERVICES

(Excluding services shown on the next chart currently being studied)

Troop Activities **Admin Services** Law Enforcement



Master Planning **Physical Security Religious Activities Environmental Mgmt Resource Management**

CONTRACTED SERVICES

Engineering Oper, M&R of Utility Plants & Systems Motor Pool, Supply Ops and Transportation Vehicle and Equipment Maintenance Administrative Services M&R Real Property Laundry/Dry Cleaning Religious Services Sports Officials

Custodial **Food Services** Packing/Crating/Local Drayage Security Alarms **Fire Protection Grounds Maintenance Vector & Pest Control** Refuse Collection **ATC Equipment Maint Operation of Swimming Pools**

MICOM ADVANCE PLANNING BRIEFING FOR INDUSTRY



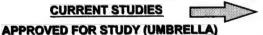
SERVICES PROVIDED BY RASA

(CONTINUED)



COMMERCIAL ACTIVITIES STUDIES

CURRENT STUDIES



- Directorate of Community & Family Activities
 - Community Recreation
 - Family Support
- · Directorate of Public Works
 - Engineering Technical Services
 - Housing Management
- Directorate of Logistics
 - Property Book
 - Property Accountability
- Provost Marshal
 - Badging & Identification
- Directorate of Flight Operations
 - Supply & Maintenance
 - Tower Operations

Child Development Services Missile Maintenance POC

Mr. Jim Mullen 955-7400

Dr. David Branham 876-3516

Mr. Darrell Brewer 876-5990

Mai. Harry Smith 842-2434

Maj. Richard Young 876-2186

AMCOM ADVANCE PLANNING BRIEFING FOR INDUSTRY



Big

EFFORT

Big

Bucks (

INSTALLATION SUPPORT SERVICES UMBRELLA



Services Contract **Installation Support**

(Period of Performance -Base Year & 4 -One Year Options)

VALUE \$124.5M

DATE FY 99

CONTRACT SOLICITATION SOLICITATION/ **CONTRACT TYPE** F&O/CPAF

POC

Ms. Jones 842-2988



Northrop-Grumman, Lawton, Oklahoma

Contract Effort

- Engineering
- Operation, Maintenance and Repair of Utility Plants and Sys.
- Maintenance and Repair of Real Property and Equipment
- Motor Pool, Transportation and Supply Operations
- Vehicle and Equipment Maintenance
- Administrative Services

AMCOM ADVANCE PLANNING BRIEFING FOR INDUSTRY



CONTRACT OPPORTUNITIES **RECURRING SERVICES**



	ANNUAL VALUE	SOLICITATION DATE	SOLICITATION/ CONTRACT TYPE	TECHNICAL POC
Custodiai (Janitorial Service)	\$ 4.0M	FY 99	SDBSA/FP	Mr. Hernandez 955-8136
Food Services (Troop Dining Facility	1.5 M y)	FY 97	SDBSA/FP	Mr. Weatherman 876-3067
Packing/Crating/ Local Drayage	.5M	FY 98	SBSA/FP	Ms. Wallace 876-1718
Security Alarms (M&R, Installation)	3 .9м	FY 99	SBSA/FP	Mr. Cates 955-6124
Fire Protection Systems (M&R)	J		ı	Mr. Hernandez 955-8136

MAMICON ADVANCE PLANNING BRIEFING FOR INDUSTRY



CONTRACT OPPORTUNITIES RECURRING SERVICES



(CONTINUED)

	ANNUAL VALUE	SOLICITATION DATE	SOLICITATION/ CONTRACT TYPE	TECHNICAL
Vector & Pest Control	\$.25M	FY 98	SBSA/FP	Mr. Manis 876-0885
Grounds Maintena	ance 1.5M	FY 99	SBSA/FP	Ms. Johnson 876-4245
Laundry/Dry Clea	ning .4M	FY 01	F&O/FP	Ms. Pugh 842-9831
Refuse Collection	.75 M	FY 99	F&O/FP	Mr. Kellum 842-0033
ATC Equipment Maintenance	.125M	FY 00	F&O/FP	Mr. York 876-1573

PANICON MARYANGE PLANNING BRIEFING FOR INDUSTRY



CONTRACT OPPORTUNITIES RECURRING SERVICES

(CONTINUED)



SOLICITATION **TECHNICAL** ANNUAL SOLICITATION **CONTRACT TYPE** POC VALUE DATE Religious Services \$.11M CH Vicalvi FY00 F&O/FP 876-2964 .16M Operation of FY01 SBSA/FP Mr. Chemsak



Sports Officials .07M

Swimming Pools

FY98

SBSA/FP

Mr. Compoc 842-2574

876-2315

AMCOM ADVANCE PLANNING BRIEFING FOR INDUSTRY



CONTRACT SUMMARY



CONTRACT TYPE

DOLLAR VALUE

\$30.00M



FULL & OPEN COMPETITION
(Includes \$25M for Installation Support Services
Umbrella Contract with Northrop Grumman)

JOB ORDER CONTRACTS \$ 6.00M

SMALL BUSINESS SET ASIDE \$ 5.60M

SMALL DISADVANTAGED
BUSINESS SET ASIDE

8A CONTRACTS

\$ 2.94M

\$ 5.50M

TOTAL CONTRACT EFFORT \$50.04M





HEADQUARTERS U.S. ARMY AVIATION & MISSILE COMMAND

1997 Advance Planning Briefing for Industry

RESOURCE MANAGEMENT DIRECTORATE

MR. WILLIAM G. MATTHEWS
Deputy Director

POC: Ms. Kay Patton 876-4450

97 APBI.ppt



U.S. ARMY AVIATION & MISSILE COMMAND FUNDING OUTLOOK

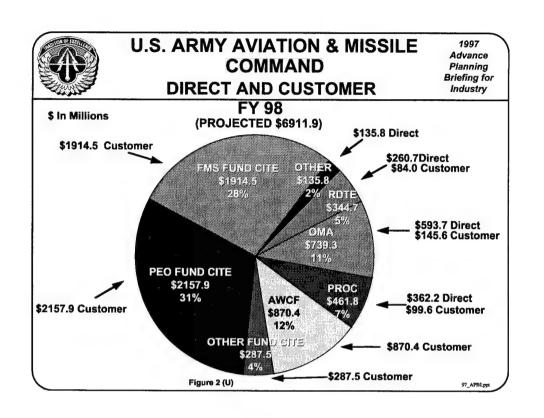
1997 Advance Planning Briefing for Industry

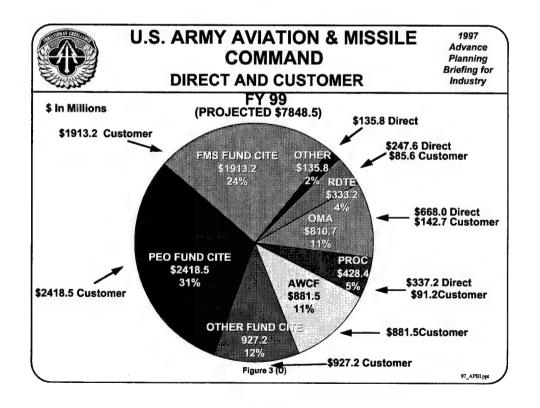
OVERVIEW

- DIRECT AND CUSTOMER FUNDS
 - FY 98
 - FY 99
- CONTRACTOR VERSUS IN-HOUSE
- TOTAL AMCOM DIRECT ARMY FUNDING PROFILE
- RDTE FY 98-03
- PROCUREMENT FY 98-03

Figure 1 (U)

97_APBI.pp



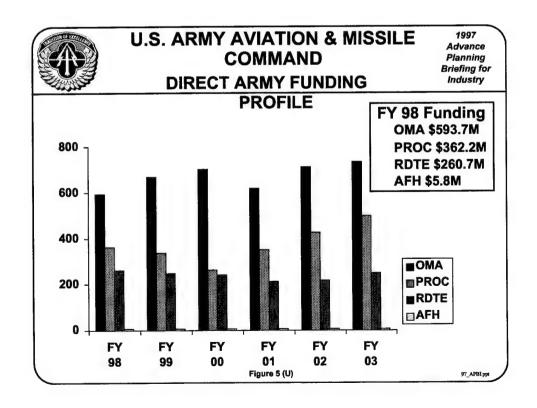




U.S. ARMY AVIATION & MISSILE COMMAND CONTRACTOR VS IN-HOUSE

1997 Advance Planning Briefing for Industry

33347								
\$ In Millions					FMS FUND	PEO FUND	OTHER FUND	
FY 98	<u>OMA</u>	PROC	RDTE	AWCF	CITE	CITE	CITE	<u>OTHER</u>
IN-HOUSE	295.8	120.1	139.8	227.1	16.1			15.5
CONTRACT	443.5	341.7	204.9	643.3	1898.4	2157.9	287.5	120.3
FY 99								
IN-HOUSE	284.8	111.6	132.3	419.6	14.8			15.5
CONTRACT	525.9	316.8	200.9	461.9	1898.4	2418.5	927.2	120.3
Figure 4 (U)								
(97_APBI.ppt





U.S. ARMY AVIATION & MISSILE COMMAND

1997 Advance Planning Briefing for Industry

RESEARCH, DEVELOPMENT, TEST, & EVALUATION

RESEARCH AND DEVELOPMENT PROGRAM BUDGET ACTIVITIES

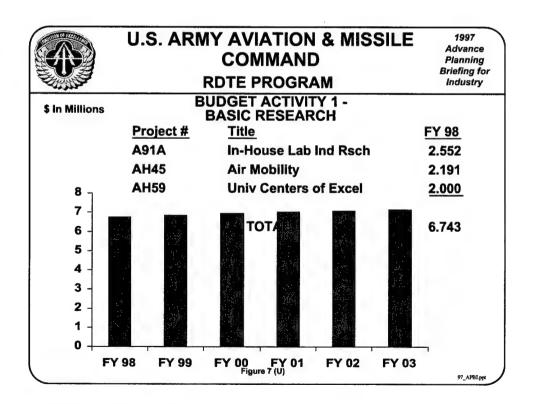
- 1 BASIC RESEARCH
- 2 EXPLORATORY DEVELOPMENT
- 3 ADVANCED DEVELOPMENT
- 4 DEMONSTRATION & VALIDATION
- 5 ENGINEERING & MANUFACTURING

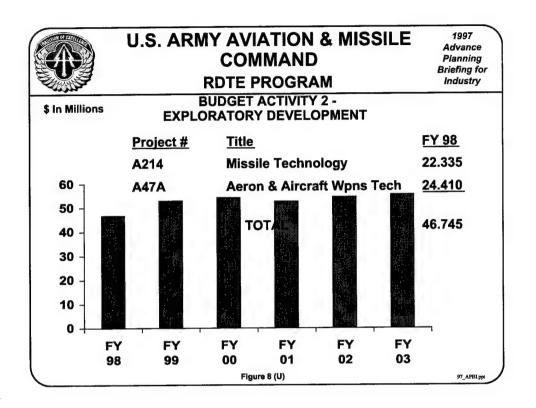
DEVELOPMENT

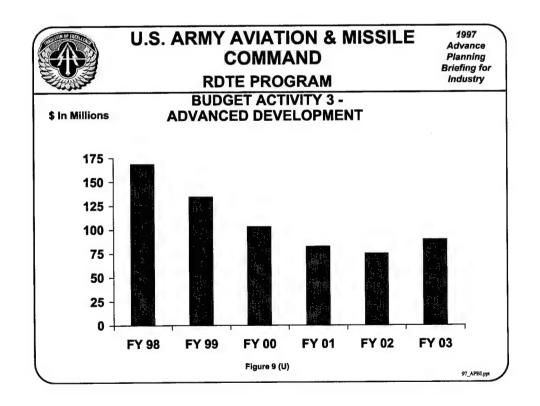
- 6 RDT&E MANAGEMENT SUPPORT
- 7 OPERATIONAL SYSTEMS DEVELOPMENT

Figure 6 (U)

97_APBI.ppt







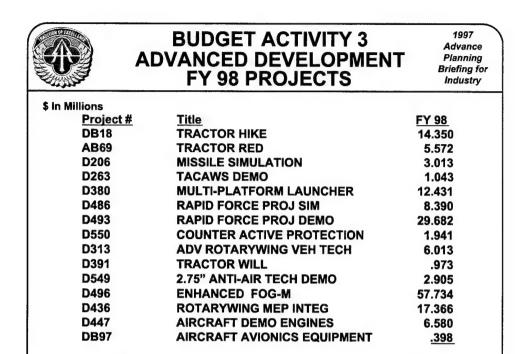
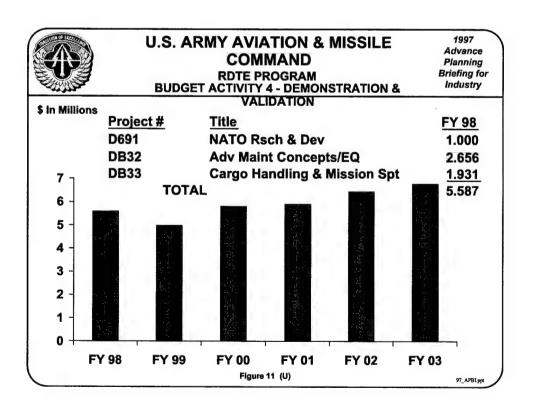
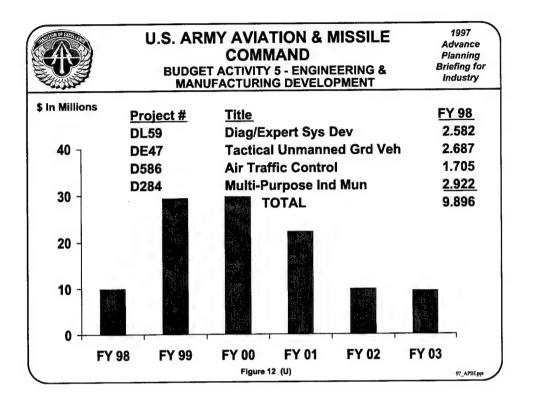


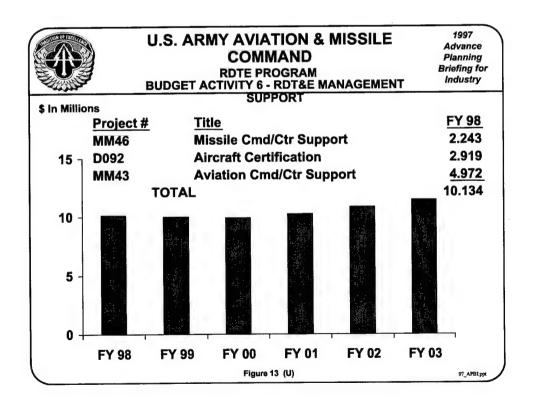
Figure 10 (U)

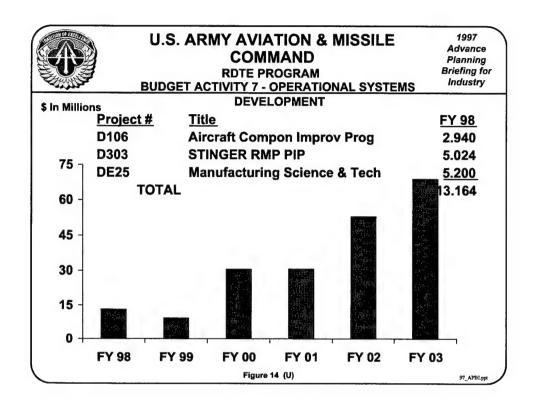
168.391

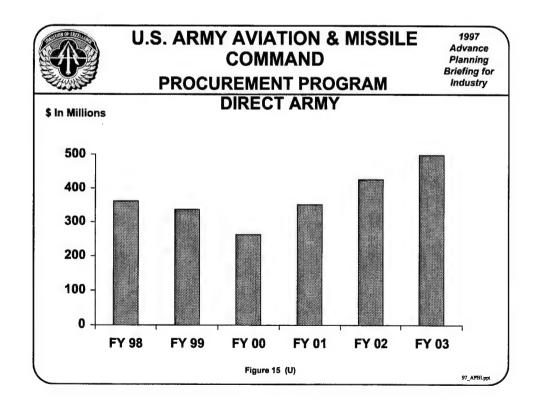
TOTAL













U.S. ARMY AVIATION & MISSILE COMMAND

PROCUREMENT PROGRAM

1997 Advance Planning Briefing for Industry

\$ In Millions

FY 98 PROGRAMS	FY	98	PR	OG	RA	MS
-----------------------	----	----	----	----	----	----

<u>Program</u>	<u>Funds</u>	Program	<u>Funds</u>
Elect Rpr Shelter TMDE Spares STINGER Blk I Upgrade Missile Demilitarization Items < \$2.0M Integ Fam of Test Equip TMDE Modernization Calibration Set Equip AH1F Mods	5.678 2.255 12.411 1.507 .954 14.828 6.572 6.572	OH-58 Mods C-20 Aircraft Mods UH-1 Mods Mods < \$2.0M Common Ground Air Traffic Control UH-60A BLACKHAWK KIOWA Warrior Industrial Facilities	.748 .853 4.679 1.735 30.636 5.802 225.084 38.822 2.049
C-12 Cargo Airplane Mods	.613		

TOTAL \$362.249

Figure 16 (U)

7 APRI net



U.S. ARMY AVIATION & MISSILE COMMAND SUMMARY

1997 Advance Planning Briefing for Industry

- Contracts comprise 88% of FY 98 AMCOM funding, which should allow considerable contractual opportunities.
- Data is based on FY 98 President's Budget and is subject to change.
- Forecast of funds show our long-range Research and Development and Procurement programs.
- RDT&E funds slightly decline thru FY 01, with funds increasing starting in FY 02.
- Procurement funds are on a downward slope thru FY 00 but show considerable increases starting in FY 01.

Figure 17 (U)

97_APBI.ppt





AMCOM



Acquisition Center

Advance Planning Briefing for Industry



L. Marlene Cruze

recutive Director

Acquisition Center

1 of 15



Acquisition Center



OUR MAJOR CUSTOMERS

PEO's, PM'S

- PEO Aviation
- PEO Tactical Missile
- PEO Missile Defense - PEO Command & Control
- PEO Intelligence &
- Electronic Warfare - PEO Armored Systems
- Modernization (And Associated PM's)
- Navy PEO Cruise Missile & Join

Tactical UAV

- Defense Intelligence Agency
- U.S.Army TMDE Activity
- STRICOM

ACQUISITION

AMCOM **ELEMENTS**

- Deputy for Systems Acquisition
- Integrated Materiel Mgt Ctr
- Research, Dev & Engr Ctr - Redstone Arsenal Spt Act
- Aviation Applied Tech Dir
- Corporate Information Ctr
- Security Assistance Mgt Dir
- Unmanned Ground Vehicle PM
- Information Mgmt Dir

OTHER CUSTOMERS

- Other U.S. Military Services - SOCOM
- Defense Logistics Agency
- CMPSC

Over 166 Major ystems, Programs Organizations





PAST PERFORMANCE

•FASA 1994 REQUIRES COLLECTION AND USE OF PAST PERFORMANCE INFORMATION

•FASA REQUIREMENT IMPLEMENTED IN FAR 15.6 AND 42..15

OPERATING UNDER TEMPORARY SUSPENSION FROM OFPP ADMINISTRATOR

COLLECT PPI AT COMPLETION OF CONTRACTS \$1,000,000 OR MORE

USE AS A FACTOR IN SOURCE SELECTIONS OF \$1,000,000 OR MORE

•ANY RECENT, RELEVANT DATA THAT CAN BE VERIFIED MAY BE USED

PREFERENCE FOR GOVERNMENT DATA

SOURCES OF INFORMATION NOT LIMITED TO FORMAL DATA BASES





Acquisition Center



STATUS OF PAST PERFORMANCE DATA COLLECTION SYSTEMS



- OVERARCHING/WORKING INTEGRATED PRODUCT TEAMS WORKING
- DEVELOPING BUSINESS AREA FOR DATA COLLECTION
- SEPARATE DATA BASES

DEPARTMENT OF THE ARMY (DA)

- PAST PERFORMANCE INFORMATION SYSTEM (PPIMS) - ESTIMATED TO GO ONLINE OCT 97

U.S. ARMY MATERIEL COMMAND (AMC)

- CONTRACTOR INFORMATION SYSTEM (CIS) -SYSTEM CANCELLED 22 MAY 97

■U.S. ARMY AVIATION & MISSILE COMMAND (AMCOM)

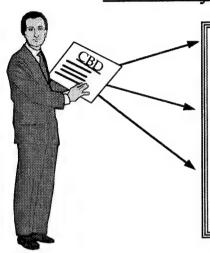
- LOCAL DATA COLLECTION SYSTEM/DATA BASE IN EFFECT UNTIL PPIMS GOES ONLINE 4 of 15







Secondary Items Initiative



- Uses the synopsis as a solicitation document
- Applicable to actions between \$25,000 \$100,000
- Helps contractors and the government reduce cycle time by 15 days

of 15



Acquisition Center





First Article Waiver



- New clause contained in our secondary item procurements containing a first article provision
- Allows contractors to request waiver of first articles based on sucessful production of a similar item
- Places onus on contractor to provide rationale for similarity of items
- Rationale reviewed and decision made by contracting officer on prospective waivers

6 of 15





Commercial Credit Card Program

- •Usage: All commercial purchases valued at or below \$2,500 (Exceptions: cellular phones, explosives and refreshments)
- •Catalog/line card may be sent to each AMCOM credit card holder
- Listing of AMCOM credit card holders may be obtained through Acquisition Center's Freedom of Information Office:

U.S. Army Aviation & Missile Command

Attn: AMSAM-AC-BM/Mary Evelyn French

Redstone Arsenal, AL 35898 Fax Number: (205) 876-5306





Acquisition Center



Commercial Credit Card Program

Recent Developments

Authorization granted to issue Special Bankcards with a purchase range of \$2500-\$25,000

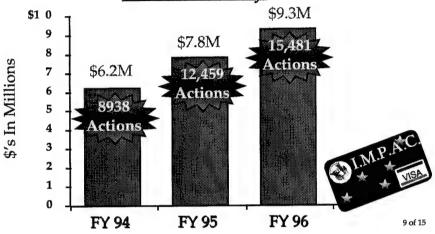
- •Special Conditions for these transactions: Limited by Statute to
- •Small Business with blanket purchase agreements in place with AMCOM
- Vendors with GSA Federal Supply Schedules (Can be large or small businesses)
- Competition required from 3 sources
- Buy American Act Applies
- Special Cards issued in August 1997
- •Blanket Purchase Agreements being established now
- •Direct Inquires to the AMCOM Acquisition Center Contracting Officer: Kathy Ray (205) 876-4226

8 of 15





Commercial Credit Card Program Recent Activity

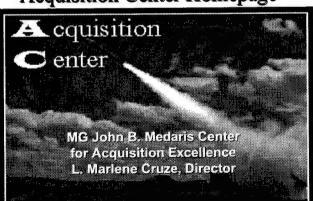




Acquisition Center



Acquisition Center Homepage





TEAM REDSTONE ACQUISITION INFORMATION & OTHER ACQUISITION INFORMATION www.redstone.army.mil/acq_ctr/

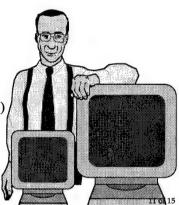






Electronic Bulletin Board System (BBS)

- •Available on the Internet at http://www.redstone.army.mil/procbbs.
- •To gain access via modem please call Randy Drawdy, 205-876-8034
- •Provides contractors the capability to read:
 - -Current Competitive Solicitations
 - -Regulations (Such as FAR, AFARS, Etc.)
 - -Synopses Information
 - -Procurement History
 - -Small Business Capabilities
 - -Qualifications of Source of Supply





Acquisition Center



On-Line Registration Website



www.acq.osd.mil/ec/

Central Contractor Registration YOUR ONLINE RESOURCE FOR TRADING PARTNER REGISTRATION

http://ccr.edi.disa.mil

12 of 1





CONTRACT AWARDED WITHOUT DISCUSSIONS

SINCE 1985 SEVERAL DOZEN COMPETITIVE ACQUISITIONS FOR MISSION SUPPORT SERVICES HAVE BEEN CONDUCTED BY AMCOM ACQUISITION CENTER, INCLUDING RDEC

CONSERVATIVE VIEW HAS BEEN HISTORICALLY MAINTAINED AND CREATED INCREASING LEADTIME AND WORKLOAD

CHANGING ENVIRONMENT AND DECREASING RESOURCES NECESSITATE SIMPLIFICATION OF PROCESS AS WELL AS RECOGNITION OF INCREASED RISK



13 of 15



Acquisition Center



Impediments to Award Without Discussions







AMBIGUOUS RESOLVE TO AWARD BASED UPON ORIGINAL PROPOSAL



LOOSE CONDUCT OF CLARIFICATION PHASE



LOOSELY CONDUCTED MONITORING OF EVALUATION COMMITTEES

INADVERTENT DISCUSSIONS BEING CONDUCTED BY OTHER THAN THE CONTRACTING OFFICER

14 of 15

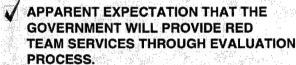




Impediments to Award Without Discussions



- LACK OF DILIGENCE/ATTENTION TO DETAIL
- FAILURE TO REQUEST CLARIFICATION
 OF SOLICITATION REQUIREMENTS
- INCLUSION OF UNACCEPTABLE PROVISIONS/ALTERNATIVES







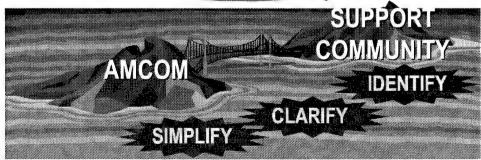


Acquisition Center



A CONTRACT FOR THE FUTURE









ADR

1997 Advance Planning Briefing for Industry

ALTERNATIVE DISPUTE RESOLUTION

"ALTERNATIVE MEANS OF DISPUTE RESOLUTION" MEANS ANY PROCEDURE THAT IS USED TO RESOLVE ISSUES IN CONTROVERSY, INCLUDING, BUT NOT LIMITED TO, CONCILIATION, FACILITATION, MEDIATION, FACTFINDING, MINITRIALS, ARBITRATION AND USE OF OMBUDSMAN, OR ANY COMBINATIONS THEREOF. 5 U.S.C.571



THE ADMINISTRATIVE DISPUTE RESOLUTION ACT OF 1996 P.L. 104-320; SEE 5 U.S.C.571

1997 Advance Planning Briefing for Industry

"MADE PERMANENT LAW OF THE ADRA OF 1990 WITH SIGNIFICANT CHANGES."



WHAT IS ADR?

1997 Advance Planning Briefing for Industry

A COLLECTIVE NAME FOR A NUMBER OF JOINT PROBLEM-SOLVING PROCESSES USED IN LIEU OF FORMAL, ADVERSARIAL METHODS FOR RESOLVING CONFLICT. USUALLY INVOLVE A NEUTRAL THIRD PARTY.

THE CONTINUUM OF ADR PROCESSES RANGE FROM THOSE OVER WHICH THE PARTIES HAVE THE MOST CONTROL (MEDIATION, CONCILIATION, PARTNERING) TO PROCESSES OVER WHICH THEY HAVE THE LEAST CONTROL (SUCH AS BINDING ARBITRATION).

3



ONE IMPORTANT ADR PROCESS IS PARTNERING

1997 Advance Planning Briefing for Industry

PARTNERING IS A PROCESS USED IN CONTRACTING THAT IS DESIGNED TO AVOID DISPUTES.

AT THE START OF A PROJECT PARTIES SEEK TO IDENTIFY COMMON GOALS AND ESTABLISH CLEAR LINES OF COMMUNICATION. IT MAY INVOLVE JOINT WORKSHOPS MANAGED BY A NEUTRAL FACILITATOR TO DEVELOP A TEAM CHARTER. A PARTNERING AGREEMENT USUALLY INCLUDES A COMMITMENT BY THE PARTIES TO USE ADR TO RESOLVE DISPUTES THAT ARISE DURING THE PROJECT.



The GOAL of the AMC Partnering Program is...

1997 Advance Planning Briefing for Industry

To promote government-industry communication and teamwork throughout the acquisition process by implementation of a "Model Partnering Process".

5

"Partnering is a natural extension of the Integrated Product
Team concept. It provides a flexible framework for government
and industry team members to work together to solve problems
and informally resolve disputes. This helps reduce program
costs and speeds the fielding of Army equipment.
To paraphrase the late, great Vince Lombardi —
Partnering isn't everything, it's the only thing."
—Honorable Gilbert F. Decker
Assistant Secretary of the Army (RDA)

"Accomplishment of AMC's mission depends on our ability to work effectively with our partners in industry. Partnering helps us to do this successfully and deliver the very best products to our ultimate customers – the soldiers."

— General Johnnie E. Wilson Commanding General, AMC

"In an era of diminishing resources, Partnering is a smart business strategy. The time that contracting officers and program managers invest in improving communication with their industry partners yields big dividends in better contract performance."

— Gary Tull Assistant Deputy Chief of Staff for Research, Development & Acquisition, AMC



What Partnering Is:

1997 Advance Planning Briefing for Industry

- A mutual commitment by the parties to facilitate improved contract performance through enhanced communication
- Where the parties form a relationship based upon teamwork, cooperation, and a shared vision for success;
- Focused on accomplishing common goals and objectives;
- An agreement to avoid surprises and expeditiously resolve disputes at the lowest possible level.

7



Genesis of Partnering

1997 Advance Planning Briefing for Industry

- Used extensively in construction contracting by industry and the U.S. Army Corps of Engineers since the 1980's.
- AMC Pilot Program successfully employed by some MSCs on a wide spectrum items/services during the last 3 years.
- AMC Steering Committee established in 1996 to develop a Model Partnering Process for use throughout AMC.



Benefits of Partnering

1997 Advance Planning Briefing for Industry

Partnering...

- establishes mutual goals and objectives
- builds trust and encourages open communication
- helps the parties eliminate surprises
- enables the parties to anticipate and resolve problems
- avoids disputes through informal conflict management procedures
- avoids litigation through the use of Alternative Dispute Resolution
- reduces paperwork



Benefits of Partnering (cont.) Planning Briefing for

Partnering...

- reduces the time and cost of contract performance
- reduces administration and oversight
- improves safety
- improves engineering efforts
- improves morale and promotes professionalism in the workforce
- generates harmonious business relations
- focuses on the mutual interests of the parties



When To Use Partnering

1997 Advance Planning Briefing for Industry

- Major/complex contract efforts
- Two years or longer program
- Problem plagued program
- Three or more major players
- · Significant technical or urgency issues
- Competitive or sole source

11



Partnering Is NOT:

1997 Advance Planning Briefing for Industry

- Mandatory
- A panacea
- · A one-way street
- Successful without total commitment
- A waiver of the parties' contractual rights
- Inconsistent with any acquisition-related statute or regulation
- Contrary to the government's business interests

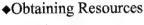


Step No. 1 Getting Started

1997 Advance Planning Briefing for Industry

- · Deciding to Partner
 - Where it will pay off
 - Anyone suggests Partnering
 - Apply "When to Use..."
 criteria
- ◆Making the Commitment
 - ◆Senior management
 - ◆Program Stakeholders
 - ◆Empowerment of Participants
 - ◆Designation of "Champions"

13



- **♦**Time
- ♦Money



Step No. 2

Communicating With Industry

1997 Advance Planning Briefing for Industry

- Extending the invitation to Partner
 - Solicitation
 - World Wide Web
 - Pre-Solicitation Conference
- Securing a Mutual Agreement to Partner

Step No. 3

1997 Advance Planning Briefing for T Industry

Conducting the Workshop and Developing the Charter Industry

- Selecting a Facilitator
 - Role of the Facilitator
- Preparing for the Workshop
 - Selecting the Participants
 - Reviewing the Contract
 - Choosing a Workshop Site
 - Coordinating with the Facilitator

15

Step No. 3 (cont.)

1997 Advance Planning Briefing for

Conducting the Workshop and Developing the Charter Industry

- Conducting the Workshop
 - Team-building
 - Roles & Responsibilities
 - The Charter or Agreement
 - Problem Resolution
 - · Rocks in the Road
 - Conflict Escalation
 - · Alternative Dispute Resolution
 - Measuring Success



Step No. 4 Making It Happen

1997 Advance Planning Briefing for Industry

- Following Procedures
- · Active Champion Involvement
- Continuous Communication
- Identification of Problems and Joint Problem-Solving
- · Periodic Reviews
- Measure and Celebrate Success
- Reinforcement

17

"Partnering has improved our program by expanding open communication. Changes and improvements have been much easier to incorporate as a result of Partnering."

— Bill Reynolds
Lead Contract Manager
Textron Marine & Land Systems

"Partnering cuts decision time, which means money, especially to the small contractor." -- David T. Morgan, Jr. Vice-President/General Manager Valentec Systems, Inc.

"Partnering has replaced fingerpointing with Teamwork."

-- Dr. Daryl R. Kendrick
Program Director
Lockheed Martin Ordnance
Systems "Through the implementation of the Partnering process, we were able to preclude a recurrence of the performance and schedule problems that we had repeatedly experienced in the past, while also eliminating claims and litigation."

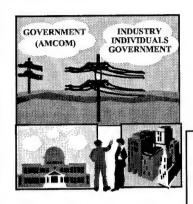
-- James Ott Director of Public Works U. S. Army Communications-Electronics Command





U.S. Army Aviation and Missile Command Advance **Command Ombudsman**

Planning Briefing for Industry



Mr. John W. Finafrock, AMCOM Ombudsman

U.S. Army Aviation and Missile Command

ATTN: AMSAM-OB

Building 5300, Room 5145

Redstone Arsenal, AL 35898-5000

97_APBI.ppt



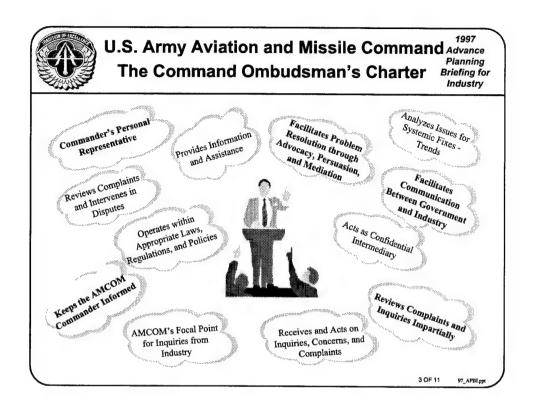
U.S. Army Aviation and Missile Command Advance Planning What's An Ombudsman?

Briefing for Industry

"OMBUDSMAN: AN INDEPENDENT SENIOR **GOVERNMENT OFFICIAL WITH RESPONSIBILITY TO** RECEIVE AND ACT ON INQUIRIES AND COMPLAINTS CONCERNING THE MSC, WHICH ARE BROUGHT TO HIS ATTENTION BY INDUSTRY, THE PRIVATE SECTOR, OR **INTERNAL GOVERNMENT SOURCES"**

U.S.ARMY MATERIEL COMMAND

2 OF 11





U.S. Army Aviation and Missile Command

"GENERAL" INFORMATION

d_{Advance}
Planning
Briefing for
Industry



Confidential Intermediary Approach Centerpiece of Ombudsman Effort and Ability to "Help"



Current Office Location Conducive to Contacts - - "Discreetly Walk Off Hallway" Building 5300, Room 5145 (First Floor)



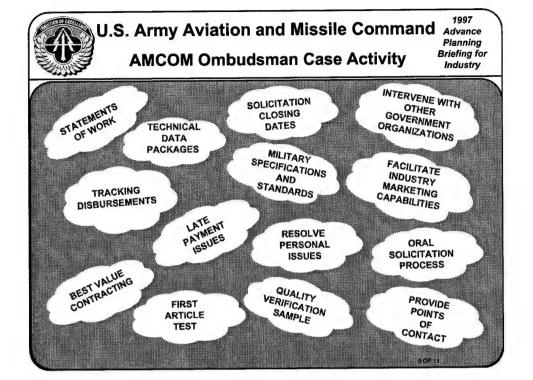
Cases Generally Fall into These Categories:

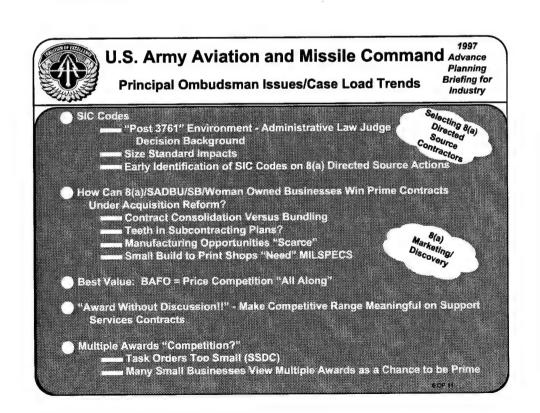
- 30-40% Solicitations
- 20-30% Contracts

Mix Varies Over Time

- 15-25% Business Opportunities
- 5-8% Personal

4 OF 11 97_APBI.ppt



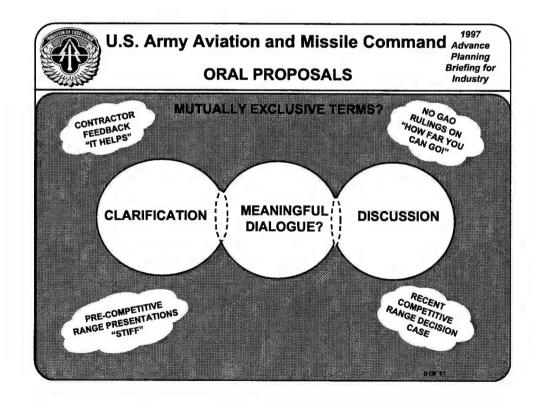




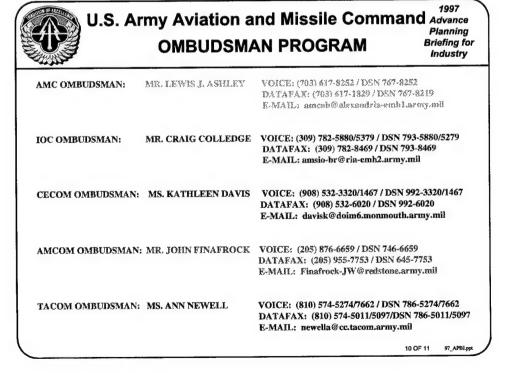
U.S. Army Aviation and Missile Command Advance Principal Ombudsman Issues/Case Load Trends (con't)

1997 Briefing for Industry

- Use of ATCOM PATS in AMCOM Possibility of AMCOM PATS?
- Marketing Interests A76 Study Capable Firms
- Privatization QDR Results Inquiries
- Conspiracy Theories Abound SIC Code Changes Targeted -Complain or Protest and You Are Blackballed
- Oral Proposals Questions Some Experience Now.









U.S. Army Aviation and Missile Command Command Ombudsman

EQUIP/SUPPLY/SERVICES/MAINTAIN FAA - PHASE II -- ACTIONS PENDING

1997 Advance Planning Briefing for Industry

ACTIONS	PROPONENT/STATUS
BRIEFING TO VICE CHIEF OF STAFF OF ARMY BY AMSAA	HQ AMC POSTPONED (QDR)
AMC REIMBURSABLE POLICY - ESTABLISH POLICY TO STANDARDIZE PROCEDURES AND PROCESSES FOR DEVELOPING RATES	HQ AMC / TBD
6.X CHALLENGE - DETERMINE WHO SHOULD BE DOING 6.1, 6.2, 6.3, AND APPRORIATE BALANCE OF EFFORTS ACROSS THE COMMAND	HQ AMC / BEING STAFF
 COMMAND WIDE BUSINESS PRACTICE REVIEW/STANDARDS - MEA-LED TEAM TO INVESTIGATE BEST BUSINESS PRACTICES AT THE FUNCTIONAL LEVEL 	MEA / 15 AUG 97
CONFIGURATION MANAGEMENT AUTOMATION - IEA TEAM TO INVESTIGATE AUTOMATED SYSTEMS, AND IDENTIFY BEST SOLUTION, IMPLEMENTATION TIMEFRAME AND COST	IEA / 30 SEP 97
■ TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE) SUPPORT - JOINT AMC/ARNG GROUP TO EVALUATE OPTIONS, REPORT TO CG AMC AND DA DCSLOG	HQ AMC / 30 SEP 98
FOCUSED SUSTAINMENT MAINTENANCE (FSM) - AMC/DA TEAM TO DEVELOPE DETAILED PLAN FOR MOVING ARMY TOWARD FSM	HQ AMC / 30 SEP 97 *
FOCUSED SUSTAINMENT MAINTENANCE (FSM) - AMC/DA TEAM TO DEVELOPE DETAILED PLAN FOR MOVING ARMY TOWARD FSM	RMD / 30 SEP 98 *

* OUR BEST ESTIMATE

11 OF 11

EDWARDS-001 (BACK-UP) - 1200-28JUL97

97_APBI.ppt





1997 Advance Planning Briefing for Industry





OVERVIEW

1997 Advance Planning Briefing for Industry

SADBU

- WHO WE ARE
- WHAT WE DO
- WHAT OUR GOALS ARE
- SIGNIFICANT PROGRAM REQUIREMENTS
 AND FEATURES



SMALL BUSINESS PROGRAM

1997 Advance Planning Briefing for Industry

- MANDATED BY LAW AND E.O.
- · COVERAGE:
 - SMALL DISADVANTAGED BUSINESS (8a)
 - WOMEN-OWNED SMALL BUSINESS
- HISTORICALLY BLACK COLLEGES & UNIVERSITIES & MINORITY INSTITUTIONS (HBCUs/MIs)
- GOALS ESTABLISHED BY CONGRESS AND PRESIDENT -ADJUSTED TO REFLECT COMMAND, INSTALLATION CIRCUMSTANCES.



ROLE OF SMALL BUSINESS OFFICE

1997 Advance Planning Briefing for Industry

- PROVIDES:
 - ADVICE AND GUIDANCE TO SMALL BUSINESS AND HBCUs/MIS REGARDING MARKETING, CONTRACT AND SUBCONTRACT OPPORTUNITIES AND PROCEDURES,
 - ADVICE AND GUIDANCE TO PROGRAM MANAGERS REGARDING SMALL BUSINESS CAPABILITIES, ACQUISITION STRATEGIES, CONTRACT PERFORMANCE.
- INTERFACES WITH:

SBA

- ON ALL SMALL BUSINESS MATTERS
- ON 8(A) PROGRAM REQUIREMENTS
- · HBCUs/MIs
 - ON ALL UNIVERSITY RELATED MATTERS



AMCOM FY 98 SMALL BUSINESS PROJECTIONS

1997 Advance Planning Briefing for Industry

• Total Small Business	(14.7%)
• Small Disadvantaged Businesses	(3.8%)
• Women-Owned Small Businesses	(1.5%)
• Research and Development	(13.0%)
Historically Black Colleges and	(11.7%)
Universities/Minority Institutions (HBCU/MI)	



CENTRAL CONTRACTOR REGISTRATION (CCR)

1997 Advance Planning Briefing for Industry

- ONE TIME REGISTRATION FOR CONTRACT AWARD ELIGIBILITY
- REPLACES THE STANDARD AUTOMATED BIDDERS LIST (SABL)
- CONTRACTORS MUST BE REGISTERED BY MARCH 31, 1998 TO COMPETE FOR AWARD
- DOD CCR MAY BE ACCESSED VIA THE FOLLOWING:
 - http://www.acq.osd.mil/ec
 - DIAL UP MODEM 614-692-6788 (User ID: ccrpub; password: pub2ccri)
 - DOD CERTIFIED VALUE ADDED NETWORK (VAN)
 - TOLL FREE NUMBER 1-800-334-3414 (FOR PAPER COPY)



TEAM REDSTONE ACQUISITION CENTER BULLETIN BOARD SYSTEM

1997 Advance Planning Briefing for Industry

(http://www.redstone.army.mil/procbbs/)

- Spares/Repair Parts (MASTER SOLICITATION)
- Advanced Planning Acquisition Information
- Solicitations
- Synopses
- Procurement History Query (by NSN)
- Draft Requests for Proposal (RFP)--These files are large
- Small Business Capabilities
- · Qualifications of Source of Supply
- AMCOM Acquisition Desk Guide



ADVANCED PLANNING ACQUISITION INFORMATION QUERY

1997
Advance
Planning
Briefing for
Industry

- MAJOR WEAPON SYSTEMS:
 - SELECT THE PROPONENT ORGANIZATION:
- NON-WEAPON SYSTEMS:
 - SELECT THE PROPONENT ORGANIZATION:
- REPAIR PARTS LIST:
- DEPOT MAINTENANCE AND REPAIR LIST:



SMALL BUSINESS CAPABILITIES

1997 Advance Planning Briefing for Industry

- DATABASE COMPOSED OF MANUFACTURING AND SERVICES CATEGORIES
- SERVES AS INDICATION OF ELIGIBLE FIRMS FOR SET-ASIDE DETERMINATIONS
- IMPORTANT THAT INTERESTED FIRMS REGISTER WITH SB OFFICE



Chief

SMALL BUSINESS OFFICE LOCATED IN BLDG 4488, RM A-106

1997 Advance Planning Briefing for Industry

FAX (205) 842-0085

Mr. John F. Nelson		(205) 876-5441	
•	Small Business Specialist		
	Mr. Lee Ford	876-5318	
	Mr. Robert Schrader	842-6239	
	Dr. Carol Sedlacek	876-2561	
	Mr. David Seitz	876-2376	
	Ms. Judith Stewart	876-0921	



Acronym List

21st Century Land Warrior 21CLW Three Dimensional 3D A/C Aircraft Army Air and Missile Defense Command AAMDC Advanced Battlespace Information Systems ABIS Airborne Laser ABL Anti-Ballistic Missile ABMARROW Continuation Experiments ACES Advanced Concept Technology Demonstration ACTD Advanced Distributed Simulation ADS Air Force AF Air Force Equipment Management Information System AFEMIS Air Force Logistics Information File AFLIF Anti-jam GPS Technology Flight Test AGTFT Artificial Intelligence ΑI Automated Identification Technologies AIT Advanced Image Intensifier AI2 Advanced Joint Planning AJP Advanced Light-weight Influence Sweep System ALISS Army Materiel Command AMC Ammunition Logistics System AMMOLOGS Advanced Minehunting and Mapping Technologies AMMT AOC Air Operations Center AP Armor Piercing All Service Combat Identification Evaluation Team ASCIET Anti-Ship Cruise Missile ASCM Assistant to the Secretary of Defense (Atomic Energy) ASD(AE) Autonomous Surveillance/Reconnaissance Networks ASRN Advanced Traceability and Control ATAC Advanced Tactical Missile System ATACMS Army Total Asset Visibility VATA Advanced Technology Demonstration ATD Asset Tracking Logistics and Supply System ATLASS Asynchronous Transfer Mode MTAATMD Advanced Theater Missile Defense Automatic Targeting Radar; Automatic Target Recognition ATR Advanced Unitary Penetrator AUP Biological В Battlefield Awareness and Data Dissemination BADD Battlefield Combat Identification System BCIS Battle Damage Assessment BDA Bradley Fighting Vehicle BFV Ballistic Missile BMBallistic Missile Defense Acquisition Executive BMDAE Ballistic Missile Defense Organization BMDO Ballistic Missile Technology BMT Battalion Tactical Operations Center BN TOC Basic Research Plan BRP Battery Tactical Operations Center BTRY TOC

C Chemical
C&C Cut and Cover

BW

Biological Weapon

C/B Chemical and Biological C2 Command and Control Command and Control Warfare C2W C3 Command, Control, and Communications C3I Command, Control, Communications, and Intelligence C4 Command, Control, Communications, and Computers C4I Command, Control, Communications, Computers, and Intelligence C4ISR Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance CA Contract Award CAC2 Combined Arms Command and Control CAIMS/OMMS Conventional Ammunition Integrated Management System CAPI Cryptographic Application Programming Interfaces Consolidated Aerial Port System II CAPS-II CAS Close Air Support CAS-A Combat Ammunition System (Wholesale Level) CASTFOREM Combined Arms Support Task Force Evaluation Model CATOX Catalytic Oxidation Context-Based Command and Control CBC2 CID Combat Identification CIMMD Close-In Man Portable Mine Detector CINC Commanders-in-Chief **CJCS** Chairman, Joint Chiefs of Staff CJTF Commander, Joint Task Force CMCruise Missile Cargo Movement Operations System CMOS COA Course of Action COBRA Coastal Battlefield Reconnaissance and Analysis CONOPS Concept of Operations CORPS SAM Corps-Surface-To-Air-Missile COTS Commercial Off-the-Shelf CP Counterproliferation CPAF Cost-Plus-Award-Fee CPIF Cost-Plus-Incentive-Fee CPFF Cost-Plus-Fixed-Fee CW Chemical Weapon DAAS Defense Automated Addressing System DARPA Defense Advanced Research Projects Agency DBK Dominant Battlespace Knowledge DDRE Director of Defense Research and Engineering DEPRA Defense Program for Redistribution of Assets DIAL Differential Absorption of Light Directional Infrared Countermeasures DIRCM DIS Distributed Interactive Simulation DISC Differential Scattering DISN Defense Information Systems Network DIW Detection, Identification, and Warning DLA Defense Logistics Agency Defense Modeling and Simulation Organization DMSO Defense Nuclear Agency DNA DOB Depth of Burst DoD Department of Defense DSB Defense Science Board DSP Defense Support Program DSS Distribution Standard System

Direct Support Stock Control

DSSC

DSTAG Defense S&T Advisory Group
DTAP Defense Technology Area Plan

DTAV Defense Total Asset Visibility Program

DTO Defense Technology Objective

DUSD(AT) Deputy Undersecretary of Defense (Advanced Technology)

EA Electronic Attack

ECM Electronic Countermeasures
EKV Exo-Atmospheric Kill Vehicle

EMD Engineering Manufacturing Development

EMI Electro-Magnetic Interference

EN Explosive Neutralization

EO Electro-Optics

EP Electronic Protection
ES Electronic Support

ESAI Enhanced Situation Awareness Insertion

ESM Electronic Support Measures

EUCOM European Command
EW Electronic Warfare

FACs Forward Air Controllers
FDA Food and Drug Administration

FFP Firm-Fixed-Price

FLIR Forward Looking Infrared Radar

FO/FAC Forward Observer/Forward Area Controller

FR France

FTIR Fourier Transform Infrared

FUE First Unit Equipped

FW Fixed Wing Fy Fiscal Year

FYDP Future Years Defense Plan

GBI Ground Based Interceptor

GBR Ground Based Radar

GBS Global Broadcast System

GE Germany

GEM Guidance Enhanced Missile
GPS Global Positioning System
GTN Global Transportation Network

HF High Frequency

HMD Helmet Mounted Display

HMMWV High Mobility Multipurpose Wheeled Vehicle

HPAC Hazard Prediction Analysis Capability

HPM High Powered Microwave
HTI High Temperature Incendiary
HTSF Hard Target Smart Fuze

HW Hardware

HWIL Hardware-In-The-Loop

IADS Integrated Air Defense System
ID Identification (Friend or Foe)
IFD Interim Feasibility Demonstrations

IFF Identification Friend or Foe

IFT Integrated Flight Test
IMINT Imagery Intelligence
IMS Ion Mobility Spectroscopy
INFOSEC Information Systems Security

IOC Initial Operating Capability

IOT&E Initial Operations Test & Evaluation

IP Internet Protocol

IR Infrared

IRCM Infrared Countermeasures
IS Information Superiority

ISR Intelligence, Surveillance, and Reconnaissance

IT Italy

ITAG Inertial Terrain-Aided Guidance

IW Information Warfare

IW BDA Information Warfare Battle Damage Assessment

IW-D Defense Information Warfare
IW-O Offensive Information Warfare
IW-P Information Warfare-Protect

Javelin Medium Range Anti-Tank Missile (2 km Dragon replacement)

JAMC Joint Amphibious Mine Countermeasures

JBPDS Joint Biological Point Detection System

JBREWS Joint Biological Remote Early Warning System

JCM Joint Countermine

JCOS Joint Countermine Operational System

JCS Joint Chiefs of Staff

JDAM Joint Defense Attack Munition

JNBCRS Joint Service Reconnaissance System

JPO-BD Joint Program Office for Biological Defense

JROC Joint Requirements Oversight Council
JSAWM Joint Service Agent Water Monitor

JSCMAD Joint Service Chemical Miniature Agent Detector

JSCWILD Joint Service Chemical Warning and Identification LIDAR

Detector

JSIMS Joint Simulation System

JSLSCAD Joint Service Lightweight Standoff Chemical Agent Detector

JSSAP Joint Service Small Arms Program
JTAGS Joint Tactical Ground Station

JTF Joint Task Force

JTIDS Joint Tactical Information Distribution System

JTMD Joint Theater Missile Defense
JTR Joint Training Readiness

JTR Joint Training Readiness

JWARN Joint Warning and Reporting Network

TWCA Toint Warfighting Campbility Aggregation

JWCA Joint Warfighting Capability Assessment JWCO Joint Warfighting Capability Objective

JWDTO Joint Warfighting Defense Technology Objective

JWE Joint Warfighting Experiment

JWID Joint Warfare Interoperability Demonstrations

JWIP Joint Warfighting Integration Program

JWSTP Joint Warfighting Science and Technology Plan

kHz Kilohertz

LAD Large Area Decontamination

LAD Logistics Anchor Desk

LADAR Laser Radar

LAV Lightly Armored Vehicle LES Leading Edge Services

LIDAR Light (Laser) Detection and Ranging

LIF Logistics Intelligence File

LIPS Logistics Information Processing System

LINK Logistics Information Network

LLNL Lawrence Livermore National Labs

LRIP Low-Rate-Initial Production
LRS Littoral Remote Sensing

LSTAT Life Support

M&S Modeling and Simulation

M/S Multispectral

MALD Miniature Air Launched Decoy

MAGTF II Military Assistance Group Task Force - II

MASS MICAP Asset Sourcing System

MCMIA Mine Countermeasures Integration and Automation

MEA Mission Effectiveness Analysis
MEADS Medium Extended Air Defense System
MITES Mobile Intelligent Targeting Elements

MITL Man-in-the-Loop
MLS Multi-Level Security

MMTC Monolithic Microwave Integrated Circuit
MOBA Military Operations in Built-Up Areas
MOE Military Measures of Effectiveness

MOU Memorandum of Understanding

MOUT Military Operations in Urban Terrain MPIM Multipurpose Individual Munition

MPM Microwave Power Module

MRBM Medium range Ballistic Missile

MRC Major Regional Conflicts
MRL Multiple Rocket Launcher

MUMMS Marine Corps Unified Material Management System
MURI Multi Disciplinary University Research Initiative

NAMEADSMA NATO Medium Extended Air Defense System Design

NBC Nuclear, Chemical, and Biological

NL Non-Lethal

NMD National Missile Defense

NRT Near Real Time

NTM National Technical Means

NTACMS Navy Tactical Missile System/Mine Countermeasures

NUGS Nuclear Unattended Ground Sensors

O&S Operations & Support

OCSW Objective Crew Served Weapon

OICW Objective Individual Combat Weapon

OOTW Operations Other Than War

OPLAN Operations Plan
OPSEC Operational Security

ORD Operational Requirements Document

OS Operating System

OSD Office of the Secretary of Defense

PAC3 Patriot Advanced Capability

PBV Post-Boost Vehicle

PDV Project Definition Validation

PE Program Element

PEO Program Executive Office
POM Program Objective Memorandum
PPATS Proliferation Path Analysis

PRCMRL Precision Rapid Counter Multiple Rocket Launcher

PSA/TSA Pressure- and Temperature-Swing Adsorption

PSM Personnel Status Monitor

PSTS Precision SIGINT Targeting

QRP Quick Response Program

RAAP Rapid Application of Air Power

RAMICS Remote Airborne Mine Clearance System

REMIS Reliability and Maintainability Information System

RF Radio Frequency
RFP Request For Proposal

RFPI Rapid Force Projection Initiative

RFTECH Radio Frequency Technology RTD Radar Technology Demonstrator

RV Reentry Vehicle RW Rotary Wing

S&T Science and Technology

S/D Self Defense S/W Software

SA Situation Assessment/Awareness

SALTS Streamlined Automated Logistics Transmission System

SAMMS Standard Automated Material Management System

SARDB Survivable Armed Reconnaissance on the Digital Battlefield

SARSS-O Standard Army Retail Supply System-Objective

SASSY Supported Activity Supply System

SAW Surface Acoustic Wave

SBSS Standard Base Supply System (AF)

SCS Stock Control System

SEAD Suppression of Enemy Air Defenses

SEDRE Sea Emergency Deployment Readiness Exercises

SIGINT Signal Intelligence

SNAP Ship Non-Tactical ADP Program (Navy)

SOCOM Special Operations Command SOF Special Operations Forces

SOI Statement Of Input
SOJ Standoff Jamming/Jammer

SOLIC Special Operations - Low Intensity Conflict

SORTS Status of Resources and Training
SRBM Short Range Ballistic Missile
STAR System Threat Assessment Report

STOW Synthetic Theater of War

STRADIS Simulation and Training Aide for the Dismounted Soldier

STS Sensor to Shooter SUO Small Unit Operations

SW Software

TAA Tactical Assembly Area
TACAIR Tactical Aircraft
TAP Technology Area Plan

TARA Technology Area Review and Assessments

TBD To Be Determined

TBM Tactical Ballistic Missiles

TCAIMS Transportation Coordinator Automated Information Management

System

TD Technology Demonstration

TEED Tactical End-End Encryption Device

TERMS Terminal Management System

TFXXI Task Force XXI

THAAD Theater High Altitude Area Defense

TLAMS Tactical Land Attack Missile System

TMD Theater Missile Defense

TMSF Tactical Multi-Sensor Data Fusion
TMS Transportation Management System
TSD Tactical Surveillance Demonstration

TSDE Tactical Surveillance Demonstration Enhancement

TUGS Tactical Unattended Ground Sensors

U.S. United States

UAV Unmanned Aerial Vehicle
UGS Unattended Ground Sensors
UGV Unmanned Ground Vehicle
UHF Ultra High Frequency

UICP Uniform Inventory Control Point

UJTL Universal Joint Task List

UOES User Operational Evaluation System

USD(A&T) Under Secretary of Defense (Acquisition and Technology)

UV Ultraviolet (radiation)

VHF Very High Frequency

VHSIC Very High Speed Integrated Circuit

VIP Very Important Person

VMISR Virtual Master Stock Item Record VMMD Vehicle Mounted Mine Detector

VV&A Verification, Validation, and Analysis

W Watts

W/H Warhead

WBS Weapon Borne Sensor

WL Wright Laboratories, Eglin AFB WMD Weapons of Mass Destruction

WPS Worldwide Port System
WSMR White Sands Missile Range

XBR X-Band Radar

Critique Sheet

1997 Advance Planning Briefing for Industry

In order to improve future APBIs, we solicit your opinions concerning this APBI. Please fill out this form and return it to the critique box in the lobby at your convenience.

Prime Contractor Subcontractor/Vendor F	oreign
Academia Government Other	
Rating of APBI: Excellent Good Fail	<u>Poor</u>
1st Day Sessions	
Special Functions: Luncheon Speakers	
Tuesday Reception	
APBI Value to you	
Were the Briefings:	
Relevant and helpful YES NO	
Have you attended a previous APBI? YES NO If yes, please compare this APBI with previous AMCOMA	PRIs•
IMPROVED SAME LESS	<u>r Dis.</u>
IMPROVED SAIVIE LLGG	
ADDITIONAL COMMENTS:	